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# EDGE

PlayStation ■ Saturn ■ Nintendo 64 ■ PC ■ Arcade ■ Net ■ Multimedia ■ CGI

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SIDE A : nuGame sounds (interactive mix)*

SIDE AA : WipEout 2097 (Edge test mix)**

2097

11.1X3 RPM

The Future Sound of Game Music

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EDGE REMIX 96' BOOTLEG 38

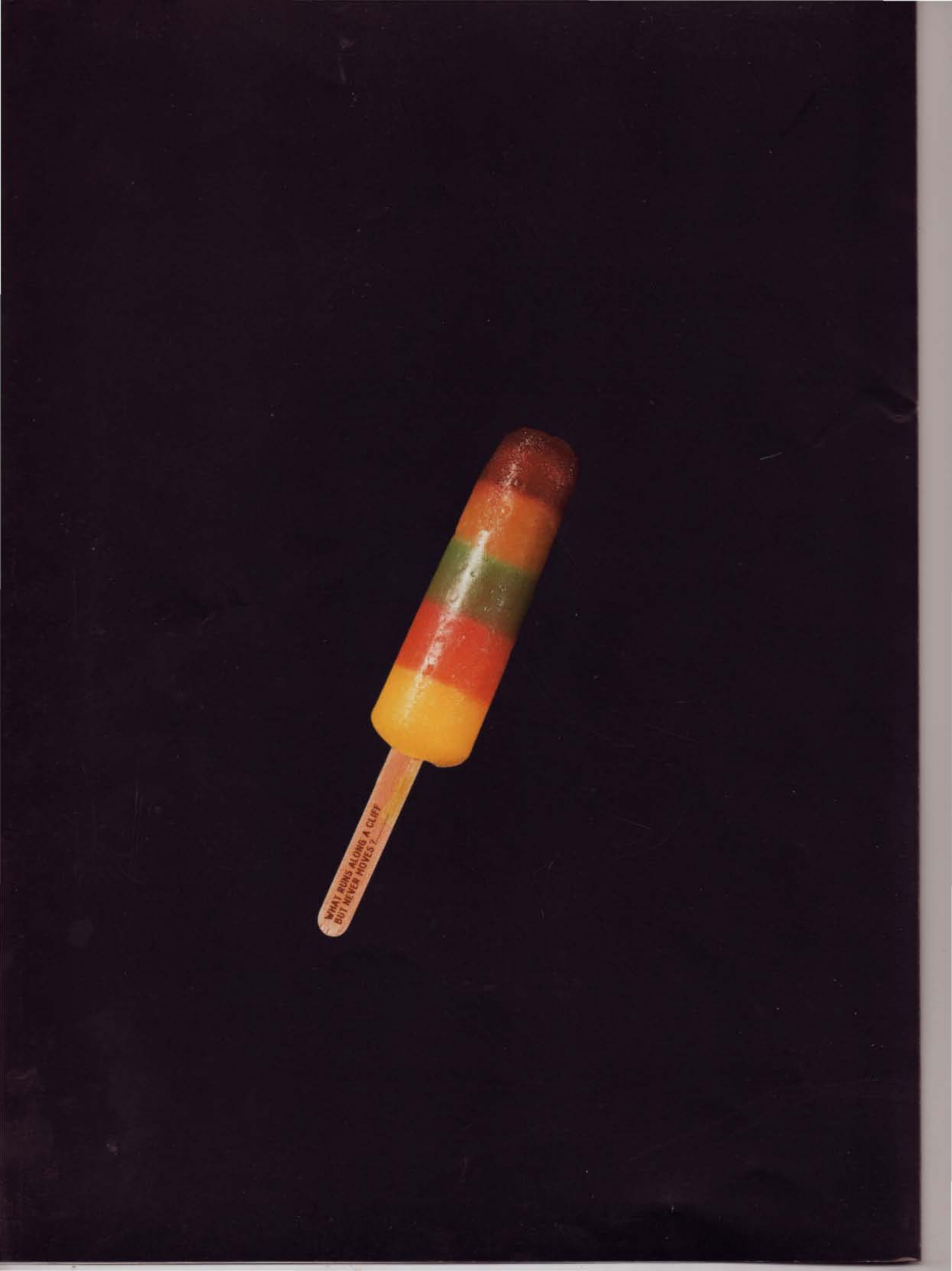
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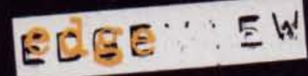
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Traditionally a secondary consideration in videogaming, music is fast becoming an vital part of the interactive entertainment mix. Edge samples the new wave of game music including *Wipeout 2097* – the first convincing evidence of the increasing symbiosis of videogaming and digital music cultures


WHAT RUNS ALONG A CLIFF
BUT NEVER MOVES?








# The Future sound of game music

## Shaping the digital soundscape

In E31, the first evidence of a new era in computer gaming was unveiled. It was termed nuGame culture and described how it had grown out of the discovery, among the ranks of the computer games industry, of an affinity with other popular cultures – most notably underground dance music and design. This fusion gave gaming one element it had unaccountably lacked: credibility among the style-conscious. Less than a year later, nuGame culture has grown up – and is well on the way to becoming a burgeoning new business. NuGame culture's second wave is bringing tighter interaction – and even a blurring of boundaries – between the worlds of music and videogames, with both set to benefit considerably. And, perhaps spurred by this developing bi-cultural relationship, musicians are starting to get their teeth into the artistic possibilities afforded by new electronic media. **Edge** examines both strands of this growing and exciting new web, and speaks to the artists making the world's most progressive videogame music.



The **Future** is almost here...

# EDGE







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Photography: Keithy Boy

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The evolution of the PC adventure has often been hindered by technology. Not in this case, though. **Edge** meets the king of the elipsoid, Andrew Spencer, and gets the lowdown on *Ecstatica 2*

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**Edge** tracks the development of links betweeen the music industry and the games industry, focusing on the most important fusion to date: Psygnosis' *Wipeout 2097* for the PlayStation


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Street Fighter EX (top right). Tokyo Game Show (above). VF2 (above right)



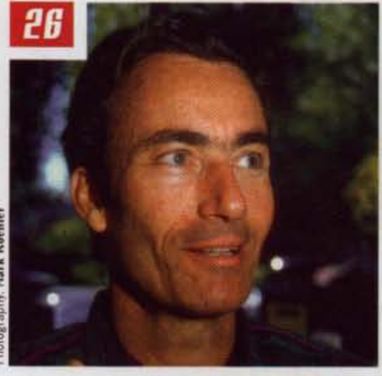


Star Gladiator (left). Queen - The Eye (above)





Wipeout 2097 (left). Street Fighter Zero 2 (above)



Photography: Mark Koehler



Photography: Hiroki Izumi





## REGULARS


**Edge** attends the Tokyo game Show – one of the largest videogames in the world. Plus, Nintendo encounters difficulties with its 64bit console – **Edge** speaks exclusivey to NOA's chairman to get the pre-US launch lowdown. Also, **Edge** attends the JAMMA show and witnesses a 2D videogaming revival

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Ex-Silicon Graphics man, **George Zachary**, debates how useful polygons are as a benchmark in modern videogming

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**Andrew Spencer** is the man behind Ecstatica. He is a developer who prefers to adopt unconventional techniques such as his company's pioneering use of elipsoid technology

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*Fighting Vipers* finally ships in Japan and proves that as far as translating its own big name coin-ops, Sega has its finger on the pulse. Plus, *Wipeout 2097*, and something called *Quake*

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The racing game on water appears to be the next big thing as far as Japanese arcade companies are concerned. **Edge** takes a look at the second to appear, as well as Capcom's new wave

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Ageing Japanese coin-ops often hold all the gameplay secrets, although clearly not all are worthy of reviving for the 32bit generation. *Nichibutsu Arcade Classics* is a case in point...

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**Edge** attends Japan's biggest videogames exhibition and discovers a wealth of 32bit games as well as third party N64 games/**page 6** • Nintendo hits problems with its 64bit console - Howard Lincoln speaks exclusively to **Edge** /**page 10** • The JAMMA show proves that 2D technology is not dead/**page 13**






*The latest **news** from the world of interactive entertainment*

# Tokyo Game Show '96: Japan's next-gen showdown

The premier event for Japan's fervent videogaming industry



**The excitement shown on the faces of delegates was clear – this was a show that few owners of next-gen machines were prepared to miss**



**Queues for the show, which was open to the public, were huge, hours before the doors opened**








**Namco's star attractions were its new racing game (right) and *Soul Edge***

The Tokyo Game Show took place recently in the new Big Sight suburb of the capital - an area reclaimed from the sea and quickly developed by the space-hungry Japanese. The popularity of the show was demonstrated by the fact that there was a 45 minute wait to buy tickets for the only train line to Big Sight. The only alternative was a very pricey 30 minute cab ride through the traffic-congested metropolis. On arrival, visitors had to suffer another lengthy delay as thousands queued to get in the venue. (Amongst the visitors were over a thousand people dressed as game characters, in full costume for the Saturday









Sega's booth was unsurprisingly crowded with games players eager to check out Saturn titles such as ***Shining the Holy Ark*** (above and above right) – the latest RPG in the popular series

than at recent expos, introducing two major new PlayStation titles – *Soul Edge* and an as yet unnamed racing game, along with a six button fighting stick.

It was no surprise that the conversion of *Soul Edge* differs little from the System 11 arcade original and most people crowding around the big screens at the Namco stand were focused on the mysterious racer. A completely redesigned *Ridge Racer* follow-up, it features a new Grand Prix mode where players earn money to buy upgrades for their cars. The basic controls are to remain the same but the driving will apparently be more technical, with some shrewd gear-changing required on the undulating circuits. *Namco Museum Volume 4* was also displayed – according to the company, over 600,000 units of the Museum series had been sold in Japan to date. So, retrogaming pays...

Sega showed off the Saturn version of *Fighting Vipers* to an eager audience, just a week prior to the game's Japanese launch but the big name at the booth was *Virtual-On* with its special dual joystick (which was reminiscent of Atari's old Battlezone arcade controls). The standard version of the robot combat game only offers a oneplayer matchup but X-Band subscribers should be

## Stick from Sega

**The dual stick control method adopted by the arcade version of *Virtual-On* has prompted Sega to develop a version for the Saturn, recently unveiled at the Tokyo Game Show (below). No news has been released on a price or whether it will make it to the UK.**






**IT WAS NO SURPRISE THAT THE PLAYSTATION VERSION OF SOUL EDGE DIFFERS LITTLE FROM THE SYSTEM 11 COIN-OP... PEOPLE CROWDING AROUND THE STAND WERE FOCUSED ON THE MYSTERIOUS RACER**





***Daytona USA Championship Circuit Edition*** **(top),** ***Riglord Saga 2*** **(above)**

parade run by the show's organisers).

What they all came to see were the 350 or so titles presented across seven different formats. The numbers tell the story of the state of the play in the Japanese market with the PlayStation leading the way with 164 titles on show. The Saturn had 110, the PC – 29, the Nintendo 64 – 14, the PC-FX – 10, the Macintosh 9 with a single PC Engine title making up the numbers.

Namco made a much stronger showing

able to hook up for a twoplayer battle as X-Band suppliers Catapult are already at work on the project. Sega also unveiled *Shining the Holy Ark*, a 3D role-player in the *Shining* series, and *Daytona USA Championship Circuit Edition*, a redesign by the Saturn *Sega Rally* team running at 30 fps and offering a split-screen twoplayer mode, replays and a ghost car mode. Elsewhere, the impressive, action-packed Saturn *Die Hard* was up and running and




**Capcom returned with a vengeance –** ***Star Gladiator*** **was popular on PlayStation but its brief showing of** ***Biohazard 2*** **on video (top left) was torture for fans of the original**

## Who is it?

**This long haired programmer, responsible for a number of 8bit games returned to Atari recently after having produced just one good title for the Jaguar during its entire lifespan**

Continued next page

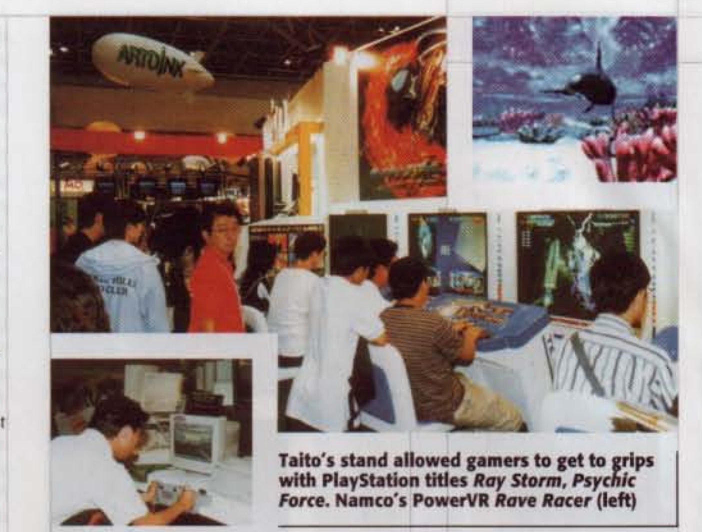


Continued

third party titles at the Sega booth included *Heart Of Darkness*, set for a December release, *Dark Saviour*, *Riglord Saga 2* and *Sakura Taisen*.

At the impressive Sony stand, SCE debuted *Beldeselva* and *Rorokenshin*. *Beldeselva* is a air combat game set in a fantasy world where pilots fly a bizarre collection of propeller-driven aircraft. Like Sega's *Virtual-On*, a special analogue double joystick will be released for the game. *Rorokenshin* is a sword-fighting game similar to *Bushido Blade* but, at this stage, not as visually impressive as the Square title. *PaRappa The Rapper* was possibly the strangest title on show - a children's game with a main character designed by cartoonist Rodney Greenblat, the player simply has to copy the ever-more complex moves of on-screen Sensei, Professor Onion.

The other major title at the Sony stand



**Taito's stand allowed gamers to get to grips with PlayStation titles *Ray Storm, Psychic Force*. Namco's PowerVR *Rave Racer* (left)**

## CAPCOM DID INTRODUCE BIOHAZARD 2 AT THE SHOW BUT REMAINED CAGEY ABOUT THE CONTENT OF THE GAME AND ONLY PLAYED THE DEMO ON TWO SMALL SCREENS AT THE BACK OF ITS BOOTH

was Zen's new-agey dolphin game, *Depth*. In it, the player steers a dolphin through a very pretty seascape collecting musical notes, composing his own soundtrack along the way, assigning the notes to any of eight tracks. Filling out the booth were the still to be released *Ark The Lad 2* and *Wild Arms*, along with Total NBA which performed relatively successfully in Japan.

Capcom did introduce *Biohazard 2* at the show but remained cagey about the content of the game and only played the demo on two small screens at the back of its booth. They were more upfront about *Star Gladiator* and *Street Fighter Alpha 2*, the two titles that dominated their stand, and which are both reviewed in this issue of **Edge**. The biggest attraction on Konami's stand was the 3D RPG, *Vandal Hearts*, although the company continues to milk *Parodius* for all its worth with two variants presented - *Sexy Parodius* and *Oshaberi*



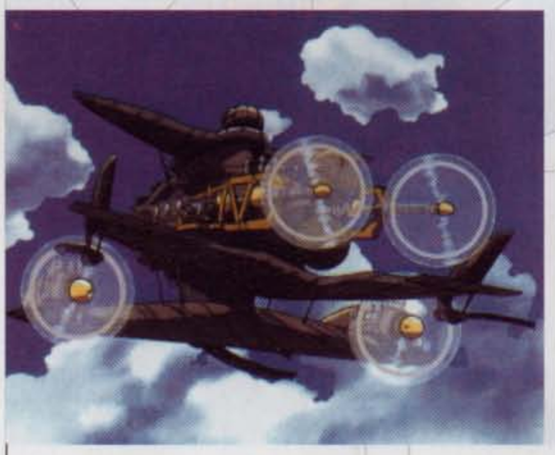
**Human's *Formula One: the next generation* (above) and SCE's *Rorokenshin* (top)**




**Square's *Final Fantasy VII* previews attracted huge crowds of expectant RPG fans. The company also premiered *Bushido Blade***

## It is...

**Archetypal coder Jeff Minter of *Tempest 2000* and *Attack of the Mutant Camels* fame. He is currently working with Jaguar pioneer Richard Miller on a new Atari chip. Don't they ever give up?**









**One of SCE's best titles was *Beldeselva* – a fantasy air flight sim (above, right). A special stick was shown (right)**

### Konami RPG

**Konami's *Vandal Hearts* (below) is destined for the PlayStation and features *Tactics Ogre*-style play**




**Turok: Dinosaur Hunter made an appearance and seemed to have progressed well since E³**

*Parodius* (Forever With Me) for both PlayStation and Saturn. *Tokimeki Memorial* - a title based on a 'sexy' young Manga idol - was also there, and has been a huge success on PlayStation, Saturn and Super Famicom in Japan.

Warp's decidedly un-Japanese way of doing things again provided welcome relief from stand after stand of identikit dolly birds. Moments after the show opened, with just a handful of visitors at their booth, Warp ran a video showing boss Kenji Eno and Warp staffers dancing and singing a song. The lyrics translated roughly as 'EO is a good game. Warp is a good company' and after the song, when Eno was handed a Sony-branded MuuMuu mascot doll, he immediately threw it to the floor. (Eno and Warp's very public snubbing of Sony at a recent PlayStation Expo ruffled many feathers in stuffy corporate Japan, adding to Eno's reputation as something of a renegade). Eno also appeared in person on the booth throughout the show where he played a piano and introduced some of Warp's artists.




**Warp's extravagant stand for its forthcoming *EO* (right) had delegates bemused. Kenji Eno (top right)**

**THERE WAS NO OFFICIAL NINTENDO PRESENCE AT THE SHOW BUT SOME NEW N64 GAMES WERE GIVEN A PUBLIC AIRING BY THIRD PARTIES. EPOCH'S DORAEMON BETRAYED ITS MARIO 64 INFLUENCES**

Square gave more demos of the long-awaited *Final Fantasy VII* and gave away a CD-ROM graphics demo that was on show at Siggraph last year. Other demos running on the Square stand were *Final Fantasy Tactics*, *Bushido Blade* and *Saga Frontier*. Takara showed the latest titles in the *Toshinden* series - *Nitoushinden* and *Toshinden Ura* - as well as *Deep Sea Adventure*. Taito had the PlayStation version of their shoot 'em up *Ray Storm* demoing on a huge screen which dwarfed their other major demo - the promising 3D beat 'em up, *Psychic Force* - and a redesigned and improved PlayStation *Ray Tracer*. Elsewhere, Banpresto had classic Toaplan shoot 'em up *Batsugun* on the Saturn and two PlayStation games - *Zeraim Zone* and 3D beat 'em up *Shadow Struggle*. Other PlayStation titles on display included a Formula One racer from OZ Club, although Human's *Formula One: The Next Generation* failed to appear as expected. Human did, however, present *Tower Clock 2*, a horror title for Sony's machine.

There was no official Nintendo presence at the show but some new N64 games were given public airings by third parties. Epoch's *Doraemon* demo betrayed the game's *Mario 64* influences with camera views, playing techniques and a first boss stage that were very similar to the Miyamoto opus. Enix's N64 role-player, Wonder Project J2, is a follow-up to the Super Famicom original, and follows roughly the same format as the 16bit game. Seta had no less than three N64 games - combat flight sim, *Wild Choppers*, racer *Rev Limit* (looking extremely smooth and slick) and *Ekoo-no-Saint Andrews*, a golf sim set at the Scottish 'home' of golf and, surprisingly, designed to work with analogue controls.

Lastly, a special mention must go to a Seta's PlayStation action RPG, *Bastard*. It could be that Seta are innocently using the correct definition of the word but perhaps someone have a word before they start planning an even worse-titled sequel?

The number of videogames exhibitions being held is increasing at an alarming rate and only goes to show just how much activity the next generation market is commanding. With E³ Tokyo scheduled for early November and Shoshinkai following, expect **Edge** to be busy...



**Seta's range of new Nintendo 64 games kept onlookers preoccupied. *Rev Limit* (top) was by far the most impressive**



**Epoch made an appearance with its *Mario*-like *Doraemon* game for the N64**

## What is it?

This pioneering toy from Tomy electronics, was marketed in 1991 as 'the most sophisticated home entertainment robot in the world'. Probably quite a boast at the time...



# N64 hits rocky ground: Lincoln rebuts rumours

NOA's chairman speaks out about recent allegations

## UK launch fixed

**As Edge went to press, Nintendo's UK distributor, THE Games, confirmed that the PAL machine would be made available in the UK and the rest of Europe, as predicted, in Spring next year – not prior to Christmas as had been hoped previously. The launch date has been set for March 1 with a price tag of £249 for the machine without a pack-in game. Software titles available at launch will according to THE's press release, be priced in the £50-60 bracket.**

Despite the fact that it finally launched its 64bit machine and released what must rank as one of the finest videogames ever made, it has been a trying summer for Nintendo. The reason? Within days of news leaking out of a price drop from $249 to $199 for the US launch of the N64, the Japanese financial daily Nihon Keizai Shimbun claimed that there was an acute slowdown in the demand for N64 consoles and that many shops were overstocked. The Japanese story caused such a panic on the Toyko and Osaka stock exchanges that Nintendo's shares were temporarily suspended. The company then called an emergency press conference to vehemently deny claims that N64 sales weren't going to plan, stating that profit targets would be met.

The US story started off another round of Chinese whispers as speculation grew that Nintendo was worried about competition from Sony and Sega. Subsequent confirmation of the price drop from Nintendo and assurances from the firm that there would be more N64s for the US market than first believed then led many to assume this was because of a downfall in demand in Japan, reasoning that overstock in the Far East was now to be shipped over to the States and effectively dumped.

A headline from Computer Trade Weekly aptly summed things up, although the truth behind Nintendo's performance in Japan and its plans for the US were drowned out by the rabid press. **Edge**'s sister magazine, **Next Generation**, spoke to Nintendo Of America chairman Howard Lincoln recently in a frank and forthright interview which sought to separate the facts from the fiction.


Castle Explorer

CTW

Dinosaur Hunter

THE ENTERTAINMENT COMPUTER TRADE WEEKLY

Nightmare week for N64

**Industry trade paper CTW recently reported on the slowdown of N64 sales, the US price drop and panic in the Japanese financial markets**

**NG** Why the sudden drop to $199?

**HL** Quite frankly, if I had it to do again I think I probably would have handled it a little bit differently. What actually happened was that we made a decision in July, for a number of reasons that I'll mention in a second, to reduce the hardware price from $249 to $199. Our plan had been to make this announcement a little bit later but before I knew it, word was out. We concluded that there was no way that we were gonna be making the big announcement and so we simply confirmed the rumours that were rampant out there.

Having said all of that, let me explain why we did what we did. First of all, we did it because we have been the leader in the videogame business for many years in the US, despite the ups and downs of the market share of one platform or the other. We want to maintain that leadership, this is a very competitive pricepoint and a point that we think that we would have ultimately gone to anyway.

Second, by going to the $199 price point now it really does enable more people to get into the category, more people to play *Super Mario 64* and, quite frankly, that was in our thinking. I guess the flipside of that is I just feel really uncomfortable about gouging people. They pay a lot for a hardware system and the next day it starts dropping in price. You know, you leave a bad taste in consumers' mouths. It's with that in mind that we made this

BY GOING TO $199 NOW IT REALLY DOES ENABLE MORE PEOPLE TO GET INTO THE CATEGORY, MORE PEOPLE TO PLAY SUPER MARIO 64 AND THAT, QUITE FRANKLY, WAS OUR THINKING BEHIND THIS

## What is it?

**The Omnibot 2000. Strangely the whole home entertainment robot trend never really took off. Perhaps it was due to the rise of the video games console. Or the astronomical £400 price...**



**The stakes are high for the Nintendo 64**

## DATA STREAM

Number of copies of the album 'Smurfs Go Pop' sold in its first seven weeks on release: 200,000
Number of people currently beta testing 3DO's internet game, *Meridian 59*: 25,000
Amount of time they've collectively spent playing the game since December '95: 500,000 hours
Percentage of jackpot lottery winners who choose to return to work: 51
Number of inventors who applied for British patents last year (New Scientist): 27,000
Number of America On Line members, according to America on Line: 6.2 million
Decrease in body temperature of the average American due to prolonged over use of central heating: 1 degree
According to a USSB Telescoop survey 'Portrait of the American Household' percentage of americans who leave the TV on to keep a pet company: 15
Percentage who consider watching TV with their children to be a family activity: 78
Percentage who said they could not live without television: 19
Amount Demi Moore earned to appear in Strip Tease: $12.5m
Stock market value of Cadbury Schweppes: £5.2bn
Copies of the *Street Fighter II* anime video sold in the US: 200,000
Total box office takings from Mortal Kombat: $70m
Number of households in the US with TV sets: 97m
Cost to Warner for resigning R.E.M: £55m



**Nintendo of America chairman Howard Lincoln fiercely defends allegations**

decision, also at the same time, of course, changed the date from September 30th to September 29th when we realised that September 30th was, in fact, a Monday. We finally notified our retailers of the fact that we were gonna launch with two games, *Pilot Wings 64* and *Super Mario 64*, and that by the end of the year we would have a total of twelve games, eight from Nintendo - that includes *Mario* and *Pilot Wings* - and four from our third party publishers.

**NG** Okay, you say that the decision to drop to $199 was actually made in July by yourselves. But most people are speculating that the decision was actually a reaction to what many people are calling disappointing sales in Japan.

**HL** There's just no basis for that. What happened in Japan, as you know, a Japanese newspaper, for reasons that are beyond me, wrote an article that was absolutely false. They made it look more credible by throwing in numbers that they pulled off the wall. They then published the article on the very day that they knew NCL was closed so we had to scramble around and deal with that story but, as you might expect, a lot of damage was already done.

**NG** But Howard, surely, these aren't stupid people that we're talking about, people on the stock exchange. Surely people will only believe an incorrect story like that in a climate in which it fits. And you have to agree that there has been a lot of disappointment with N64 sales in Japan.

**HL** I don't agree with that at all. I really don't. I don't think there's any basis for saying that. I can tell you that there is certainly some disappointment that there isn't a third or a fourth or a fifth title but that is going to be changed within a matter of weeks. The fact of the matter is that we are very, very pleased with what is going on in Japan. And when you can ship and sell a million hardware units in the middle of a heatwave in the summer in Japan in the space of five weeks, you gotta admit, that's not bad.

**NG** And the slow down is no slower that you were anticipating?

**HL** No, no, absolutely not. And quite frankly, given that false article, we had an obligation when we went into the Stock Exchange, under the Stock Exchange rules, to tell the truth and the absolute truth as best we knew it. That's why Mr Imanishi said, 'These are the numbers these are our projections for mid-term and full year. These are the facts with respect to the sell-through. We are right on plan.'

**NG** There's been talk of potential shortages and there's been, certainly, the word around all the gamers is reserve your Nintendo 64 because they're going to sell out. All of a sudden, it seems that there aren't going to be any shortages. And also, news of a fifty dollar price drop. So what happened?

**HL** Well, I can tell you that we're gonna get a little bit more than a million hardware units between September 29th and March 31st.

**NG** And that's as a result of increased manufacturing capability?

**HL** That's as a result not only of increased manufacturing capability, but of our begging, screaming, and pleading.

**NG** Howard, when you say that, does that mean that you've managed to change the ratio of allocation. Does that mean that, say, hypothetically, for every ten thousand extra you've managed to get into the US, that's ten thousand less for Japan?

**HL** No, no, the amount of additional hardware that we're gonna be able to bring in is a pittance. We're just not talking about large numbers.

**NG** Okay, but previously it was understood that you'd be able to sell all the units and there was certainly the assumption at E³ that you guys were going to face a sell-out situation at 500,000 units before Christmas

### US release dates

| | |
|---|---|
| Super Mario 64 - Sep 29 | |
| PilotWings 64 - Sep 29 | |
| Wave Race 64 - Nov 4 | |
| Cruis'n USA - Nov 18 | |
| Killer Instinct Gold - Nov 25 | |
| Tetris Sphere - Dec 2 | |
| Shadows of the Empire - Dec 2 | |
| Blast Corps - Dec 2 | |







**Arguably one of the most eagerly awaited NCL titles is *Mario Kart 64* (left), while *Wave Race 64* is the next game out in Japan (right) with a US release in November**



***StarFox 64* should be another NCL title to sway people away from 32bit**

Continued next page

Continued

## More delays



**Rumours have been circulating that LucasArts' *Shadows Of The Empire* (above) has been delayed while further work is done on the title – meaning it looks likely it will miss a pre-Christmas release. This news coincides with an announcement from Williams concerning *Doom 64* – which will now not be ready until late Spring – allegedly because id software were unhappy with some of the level designs. A version recently shown to Edge behind closed doors at ECTS was less than brilliant with none of the visual dexterity of *Quake* and, despite some decent lighting and detailed sprites, it was already looking dated…**



**The game's boss sections now use polygons but are presented in the same style**






**Non-Japanese N64 titles scheduled to appear either before or shortly after Christmas include (from left to right) Rare's *Blast Corps*, *DMA*'s Body Harvest, Angel Studios' *Buggie Boogie* and, out of the blue, H20's *Tetris Sphere***

at $250. Now, all of a sudden you're saying that there was going to be a negligible increase over and above that and yet you still say it's essential to drop down to $199… something's happened in the interim to give you less confidence in Nintendo 64.

**HL** No. I don't think that's the case at all. I think we could sell 500.000 or whatever the number is that we bring into the US between now and Christmas and we could sell it at $300 a crack. I don't think there's any question about that. But I don't think that doing something like that is in our best interest or treats consumer in a very credible way. We dropped that price because, we know that ultimately, that $249 price is going to come down, and I don't feel comfortable with the idea of gouging the first 500.000 or so gamers and then saying 'Well, we made all this money, now we're going to drop it down to another price,' and play that kind of game. I understand what you're saying and I understand what the speculation is and the only thing that I can really say is, when the product is launched, and we look at the sell-through for the week of the 29th, we're gonna know.

**NG** Just to play devil's advocate a little, it would be very easy to look at the whole Nintendo 64 project as a disaster in many respects. Let's look at what happened. It's over a year late, there's turmoil in Japan, what many are describing as apathetic sales, a last minute price drop, and still only two games. It's not perhaps what you'd have hoped for, three or four years ago, when this was first being planned.

**HL** Well, I guess you can read it however you want to read it. Let me put it this way, if you had to paint the bleakest picture you could, that would be it. And then I'd look at you with a big smile, and I'd say three words, *Super Mario 64*.

**NG** In the end it does all come down to *Super Mario 64*. But it is only one game and certainly, after all this time, launching just two games has to be a terrible blow. What's happened Howard? Where are all the other games that were promised?

**HL** Mr Yamauchi made a deliberate decision after E³, on full games that he was planning on launching in July, August and early September, because he put his money where his mouth was, and said I'm serious about this quality issue. Let's take the time, just a few weeks or few months here and there, to make certain that these other launch titles are as good as they possibly can be, and as close to *Super Mario 64* as they possibly can be. He certainly was aware that if he did this he would be subjected to a great deal of criticism, but he is gambling, and I think it's a gamble well worth taking.

**NG** And you're willing to accept the fact that for every extra month in development these N64 games are, PlayStation and Saturn development are also taking leaps and advances of their own. You're still confident that when your typical consumer walks into the mall this Christmas, the N64 lineup will be more impressive than the equivalent on PlayStation or Saturn.

**HL** I don't believe that it is possible to make quality games when you're releasing 127 games on PlayStation – you and your third parties – between July and December. And that is what is happening. No one can tell me, and I've been in the video game business a long time, that you can make 127 quality games. That's just simply not possible.

**NG** Thank you Howard.




**Konami's other Nintendo 64 titles in development include *Powerful Pro Baseball 4* (the latest in the series that graced the Super Famicom and SFC), *J-League Perfect Striker* (above), and Mah-Jong**




**Konami's *Ganbare Goemon 5* clearly pays homage to *Mario 64* with its camera angles and beautiful rendered scenery. Whether it will cross the Pacific is another matter…**



# JAMMA 96: Konami and Capcom regain ground

Japanese arcade industry veterans battle it out at arcade show





**Similarities ahoy: Konami's *Jet Wave* (top) and Sega's Model 2 *Wave Runner***

No real surprises occurred during this year's JAMMA show, which took place in mid September. Namco's System 23 failed to show despite its main rival Sega having already kick-started the future of realtime 3D with its third incarnation of *Virtua Fighter* 3 hogging most of the attention on the show floor.

Konami and Capcom fared better than usual with demonstrations of games of all genres and some progression made with technology, too. One of the best games of the show was Konami's *GTi Club Cote D'Azur* running on new 3D technology (the company has developed a new board titled Cobra, in cooperation with IBM). This linked racing game has superb graphics, unusual camera angles, and features cars such as Minis and Renault 5s careering around Southern France. Konami's other showstopper was *Solar Assault* - the latest installment of its Gradius series, but this time rendered in glorious 3D and even housed in its *Speed King* cabinet as well as in conventional stand-up coin-ops.

Of course, *Virtua-Fighter 3* was *the* fighting game of the show and is about to be released in Japan. Completed versions of *Wave Runner* and *Sega Touring Car* were also presented on the booth. As far as brand new games, though, only was shown - *Super Giant Slalom* developed by AM1. This is an obvious competitor to Namco's *Alpine Racer 2* which also debuted at the event. Sega's game features outstanding graphics, particularly in the night time stages on illuminated pistes.

While System 33 has possibly been delayed until the AOU early next year, Namco seemed short of new games.




***Aqua Jet* (left, above) was Namco's latest game to use its *System 22* technology**

Apart from its wonderful *Tokyo War* (now playable in linked form) and *Alpine Racer 2* (also linked), Namco presented *AquaJet* for the first time, with graphics similar to the other jetski games on show from Sega and Konami but with some attractive circuits and more of an emphasis on jumping.

KONAMI FARED WELL WITH ONE OF THE BEST GAMES OF THE SHOW, BUT IT WAS CAPCOM THAT, IN SOME RESPECTS, HELD ALL THE CARDS - AT LEAST IN TERMS OF LOW-END, BUT POPULAR FIGHTING GAMES

But it was Capcom that, in some respects, held all the cards - at least in terms of low-end, but popular fighting games. *Warzard* (running on its new CPSIII board) and *X-Men vs Street Fighter* both proved there is still progress to be made in the 2D arena, while its Tekken 2-like *Street Fighter EX* was in direct contrast to *Street Fighter III* seen running briefly on video. In 2D... E





**Capcom's CP System III board will offer untold 2D power. Its first game will be *Warzard* (top)**










**3D titles such as Sega's *Super Giant Slalom* jostled for position with the inventive and hugely impressive *GTi Club Cote D'Azur* (centre), Capcom's *Street Fighter EX* (see p81) was a surprise showing given its ambivalence towards 3D**

The war being fought by hardware manufacturers involves a lot of hot air, argues former Silicon Graphics man **George Zachary** – it really doesn't make sense to take numbers at face value

# Preaching polygons



**George Zachary, is a partner at Mohr Davidow Ventures, a venture capital firm working in new technology. Formerly he worked in marketing for Silicon Graphics in California**

Seemingly everyone in the game business is talking about how 3D technology is revolutionising the world of gaming. (In reality, technology isn't revolutionising anything – all it is doing is expanding the design envelope for 3D games. But that's a different story altogether). Thus, the race is on among 3D graphics accelerator manufacturers to capitalise on this big, new demand for PC 3D graphics power.

Game developers are being bombarded by these companies with pleas to have the next mega hit adapted to their hardware technology. Meanwhile, gamers are being bombarded with marketing hype and advertising claiming to cite 'technological proof' as to why each and every different company has the 'best' 3D graphics chip for this new generation of 3D games.

The tricky issue is how does a consumer differentiate and substantiate these performance claims? Consumers need to do this so they can figure out what 3D graphics hardware to buy.

I've seen it from both sides of the fence. Being a Silicon Valley venture capitalist, I've seen many start-up business plans focused on 3D graphics acceleration hardware. As a former marketeer with Silicon Graphics, I understood how to show thew technical world that we had the best graphics.

In each of these experiences, it comes down to claims surrounding a hardware's 'polygons-per-second' capability. It seems to be the standard way of measuring 3D graphics performance, yet within the next two years, 'XX polygons per second' statements will mean absolutely nothing to everyone.

The reason is that 'polygons per second' is a generic statement that does not truly represent the true performance of a 3D graphics system. (please notice that I'm using the word 'system' here and not 'chip'.) The first problem is that, unfortunately, there is no single definition of a polygon. There are at least 20 significant adverbs that modify 'polygon.' These adverbs include anti-aliased, Gouraud shading, texture-mapped, perspective-corrected, Z-buffered, triangle-meshed, lit, MIP-mapped, trilinear-interpolated, etc. These adverbs can be used with one or more of each other (Z-buffered, perspective-corrected polygons, for example) and a result, there are literally thousands of different types of polygons, all legitimate, and no single way to describe or measure them with any kind of standard.

What we're being exposed to by the marketeers of current 3D graphics companies is a selective usage of adverbs. These descriptors allow for 'marketing' polygon performance to be 1000 times better than their 'application' polygon performance. The huge range of adverbs enables the marketeer to concoct the 'right kind' of polygon that indicates a huge difference between in performance between his firm's hardware and the competition's.

The bad news for the consumers is that the amount of polygon types will only increase over the next two years as engineers develop and implement new graphics features. Silicon Graphics' customers (artists and engineers) are highly educated about this 'marketing' polygon problem and do not blindly accept the generic polygon problem marketing statements. As a result, Silicon Graphics gives its salespeople a 75-page booklet that lists all of the 3D graphics benchmarks for each workstation. This booklet enables each salesperson to provide a very specific benchmark to those people that ask.

A similar phenomena is now starting to happen in the world of both computer and console gaming. Over the past 18 months, a steady stream of 3D graphics chip companies have claimed that they can do two times the amount of polygons as the competition [Sony's original PlayStation specs claimed a performance of 1,500,0000 triangles!]. However, game developers are now beginning to ask hardware developers for specific benchmarks such as 'How many anti-aliased, tri-linear interpolated, MIP-mapped, lit, Z-buffered, Gouraud-shaded 25-pixel triangles can you both transform and pixel-fill onto a 640x480 screen?'

Game developers need to know the answers to these questions so they know how to best take advantage of the hardware. Even more importantly, they need to understand the subtle and the intricate relationship between having different types and modes of polygons active on the screen at one time.

Consumers, however, are not asking these questions yet they probably won't. There is just too much jargon for consumers to learn. The history of consumer marketing indicates that they will actually stay away from educating themselves on these issues. Consumers will continue to use screen-shots, demo shareware, magazine reviews, and salesperson recommendations as the major influences on their purchasing decisions.

So, each 3D graphics company has a choice: either sell pseudo-'benchmarks' to the consumers and bore them, or sell real 'benchmarks' to game developers with a view to selling consumers the resulting game that truly shows of the 3D power.

Sega and Nintendo have had this figured out for years. Computer gaming companies have had a window of opportunity now to execute this same strategy on the PC. If they don't do it, expect the console market to remain dominant and consumer's decision process to be really easy – don't bother buying a PC 3D graphics card at all.





**Sega's Model 2 board (*VF2*, above) manipulates about 300,000 polygons every second while its big brother, Model 3 (*VF3*, right) uses over three times as many. Or so Sega would have us believe...**

# 6 Teri Tokunaka



Photography: **Hiroki Izumi**

**President, Sony Computer Entertainment, Japan**

**SCE's Japanese president rarely gives one-on-one interviews but on a recent trip to Japan Edge was fortunate enough to get some time with him. With PlayStation currently neck-and-neck with Sega's Saturn in Japan, and a new rival in Nintendo now being taken seriously, just how confident is Sony feeling about its two-year-old console?**

**Edge** Sega is now claiming that while your 'easy' development environment may have helped the PlayStation at launch, it is now a handicap. Sega says the Saturn's longer learning curve means that although at the start it was tougher to program, at this stage of the war Saturn developers can continue to discover new tricks and hidden power, but PlayStation development is maxed out. Is this true?

**TT** I don't know. I am not an engineer, but I think this argument is misleading. The potential level of the products is a function of the basic architecture and capabilities of the format, and in that respect, I think no one will argue that the PlayStation has less power than the Saturn.

Much of the power of the PlayStation's software comes from the libraries, and these are constantly being updated and have grown more and more sophisticated. We started with 400 libraries, now we have in excess of 1,500. This has been achieved in less than two years, and as a result it is very easy to produce better and better software for the PlayStation.

**Edge** At launch you were able to make PlayStation development attractive to 'management'. Is this because you used CDs instead of cartridges?

**TT** Choosing CD-ROM is one of the most important decisions that we made. As I'm sure you understand, the PlayStation could just as easily have used masked ROM [cartridges]. The 3D engine and everything – the whole PlayStation format – is independent of the media. But for various reasons (including consumer economics, the ease of the manufacturing, inventory control for the trade, and also the software publishers) – we deduced that CD-ROM would be the best media.

As a result, in Japan we have been able to successfully reduce the software price very substantially, compared to the cartridge days. So it was very attractive for consumers who are used to purchasing $100 software, to all of a sudden have a 40% reduction.

Also, in Japan we established our own distribution network with the concept of direct sales to the retailer. This was necessary to maximize the economic advantage of CD-ROM. It also helps us control our products better and helps us get information from the retailers. All of this wasn't possible in the traditional Japanese game software distribution system.

**Edge** If you could launch the PlayStation again, would you do anything differently?

**TT** [Pause]. No. I don't think so. [Smiles].

**Edge** Sony Computer Entertainment of America has done very well in terms of dominating the 32bit market in the US. But there has been a surprising amount of managerial turmoil. First to go was **Steve Race**, then **Marty Homlish**, then **Jim Whims**. Why all this instability?

**TT** [Pause]. I don't know. [Smiles]. But all of these changes are to ensure our basic PlayStation strategy is exercised in all of the important markets.

In Japan we make very quick and sometimes very drastic decisions as to how we want to do business. And we expect a similar decision turnaround in other markets. I think that the new management team in the US will be best suited for this purpose.

**Edge** To what extent do you see the Nintendo 64 as a threat to your business?

**TT** Our sales have actually increased since the introduction of the N64, so in some ways it can be seen as helping us! Maybe it was because of the increased total amount of marketing effort, so people who have not seen the videogame market for a long time are now coming again and many of them are choosing the PlayStation.

**Edge** A lot of people consider the battle between the PlayStation and Nintendo 64 as a battle between an extensive library of great games versus *Mario 64* – without doubt, a great game. Do you see it this way?

## Tekken 2 has exceeded one million units in Japan already, and there are many titles that have exceeded 500,000 units. I don't know how many *Mario 64s* Nintendo has sold

**TT** In terms of the number of software titles, *Tekken 2* in Japan has exceeded one million units in Japan already, and there are many titles that have exceeded 500,000 units. I don't know how many units Nintendo has sold of *Mario 64*, but we have a large variety of software products that are selling very well.

I think having a broad range of games is very important. From the simple consumer standpoint, when buying a videogame system they want to play good games, and they want a good variety of games. This is the main reason they purchase the system - the PlayStation's broad library has to be a big advantage.

**Edge** So far, the PlayStation has appealed to an older audience than the 16bit consoles did. Does this mean that as the Nintendo 64 continues to market to its traditional teenage audience, the games market will be split by age, with Sony and Sega taking the older gamers, and Nintendo taking the kids?

**TT** I don't think so. We certainly started with a higher demographic about one and a half years ago, but we are seeing a continuous decline in the age of our customers.

**Edge** Is this worldwide?

**TT** Yes, but I follow the Japanese statistics most closely. When we changed the price to ¥24,800 (£155) we saw a dramatic change in the demographic. So maybe the reason that we started off with an older audience was because of price. And we have been telling our licensees that we are seeing a very dramatic change in our customers. Now, the software companies are developing the sort of games that are acceptable to a younger audience, and we are certainly trying to create these type of games ourselves.

Our current price is ¥19,800 (£125) and this makes us even more attractive to younger people. We want the PlayStation to be enjoyed by everybody, young or old. This is my dream.




**Sony Computer Entertainment's offices are located in Ohta-Ku, Tokyo. Adorning the company's reception are PlayStation game mascots (MuuMuus from Jumping Flash, left)**

**Edge** So you will fight Nintendo for the younger audience. You won't concede a draw by giving Nintendo the young gamers and you taking the older gamers?

**TT** No, I'm not confining ourselves to one particular market.

**Edge** How will you manage to increase the number of women who play games?

**TT** I am testing theories every day, with my wife!

**Edge** So does she like many PlayStation games?

**TT** There seem to be some differences between what she and I like, and what my son and daughter like. Maybe there should be more women designers creating games.

**Edge** One of Sony's most powerful allies – certainly in the U.S. and in Europe – has been Psygnosis. It must be disappointing for you that are no longer exclusively working on PlayStation.

**TT** No. Psygnosis will continue to develop good PlayStation games. I don't know what quantities they are selling on Saturn, but I saw the Saturn version of *Wipeout* – and it was okay, but even I could tell the difference between it and the PlayStation version [Smiles].

**Edge** In Japan, the battle between the Saturn and the PlayStation has been very close. Who is winning this war?

**TT** Maybe there are some times when one pulls ahead, but I think statistics are quite similar. Since the launch of the N64, though, we have been outselling Sega by a large margin – and hopefully this will continue.

**Edge** Have you ever offered Sega a deal to publish their games on the PlayStation?

**TT** I don't think so. And they haven't asked!

# Kyoko Date

**Virtual Idol**

The concept of the Idol is a uniquely Japanese one. Young dream girls, innocent living dolls without a hint of smut, 'manufactured' by music industry marketing men and served up to an eager army of fanatical consumers.

Music company Holipro has created Idols before, propelling models to pop starletdom in Japan, but Kyoko Date is different - she's a Virtual Idol. As manager of the Digital Kids project, Yoshitaka Hori is spearheading Holipro's attempt to break into the multimedia market. 'Using computer graphics, we wanted to create a person able to perform as a real artist,' he explains.

Ten staff worked on the design of Kyoko's face. Each was responsible for a specific feature and decided how 'she' should look according to their personal tastes. Motion-capture was then used to form the basis of the animation. However, the results were disappointing, as 'she' still lacked the expressive quality they wanted. So they spent six months performing what Hori describes as 'surgical operation' on Kyoko's face.

The next step for Hori is to introduce Kyoko to the Japanese public. 'We want her to appear on TV and speak,' he states. 'But we don't know whether this is possible.' So, instead, Kyoko is set to release a music CD in December, with a real person providing the vocals. Don't expect to see Ms Date on the PlayStation or Saturn, though. 'We used 40,000 polygons to make her,' says Hori, 'and even the best games machine cannot display more than 10,000 polygons. It is not technically possible.'

Now, there's a shame.

# Andrew Spencer

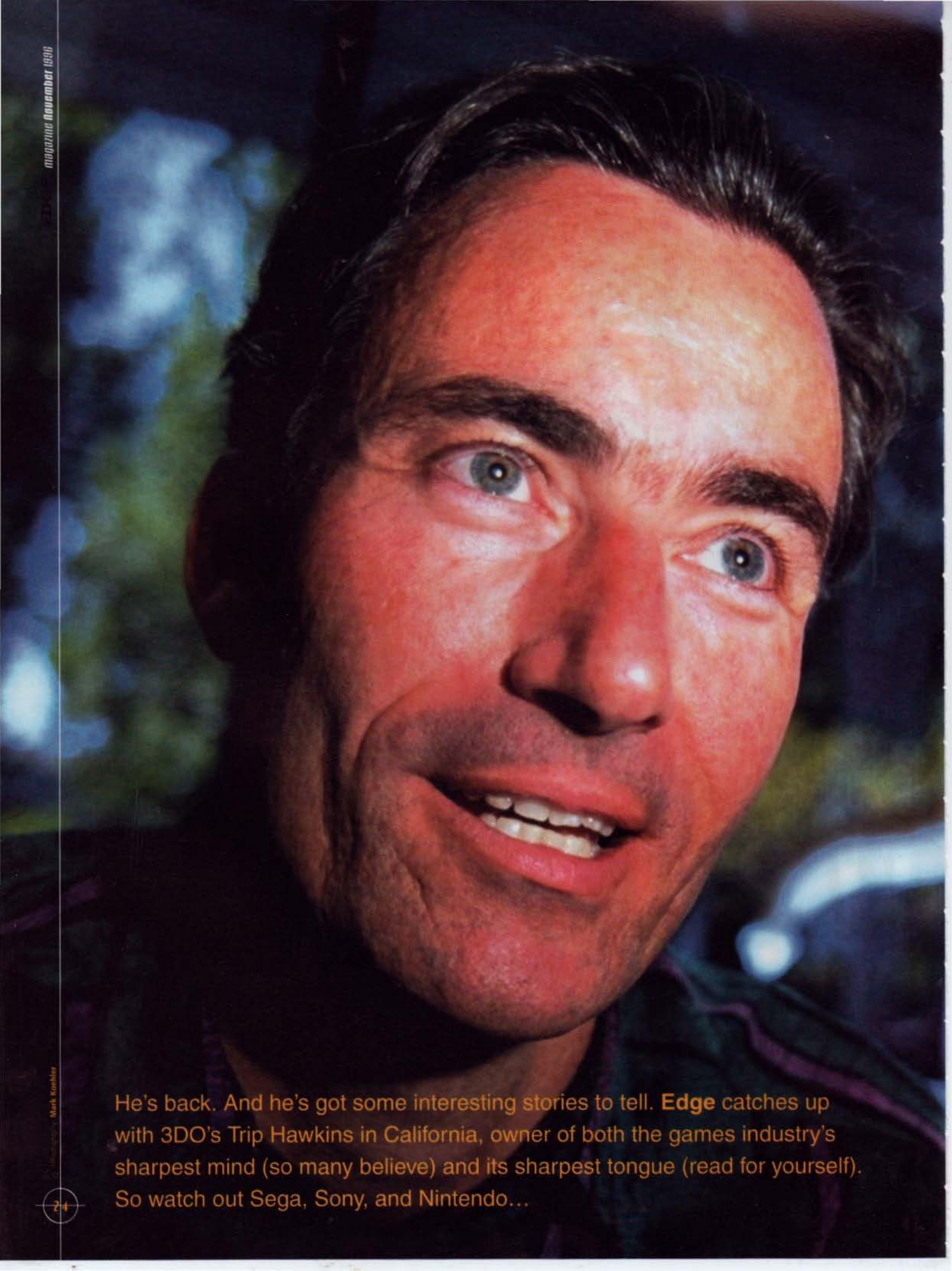
**Director, Andrew Spencer Studios**

Photography: **Jude**

While many developers seem happy conforming to strict genres and technological fads, a select few are still working to keep ecleticism and innovation alive. One of these is Andrew Spencer whose small development team - working under the rather unambiguous 'Andrew Spencer Studios' monicker - is currently working on PC arcade adventure, *Ecstatica II*. Yes, its a well worn genre, but visually the title is unique, due to the aesthetically creative employment of ellipsoids rather than polygons. 'The best thing about the games industry is that it is such a young industry' enthuses an idealistic Spencer. 'It is still wide open to new ideas and possibilities and the rules haven't yet been written as to what will make a good game with the emerging technology. It is exciting to be a part of this process of experimentation and discovery - it's rather like the early days of the film industry'.

Subverting the rules seems to be a major preoccupation. For the team's next game, the 3D shoot 'em up adventure, *Urban Decay*, they've decided to embrace that widely accepted 3D building block, the polygon. However, to boost another well worn formula, Spencer is working on a intuitive, proactive camera technique which switches between first and third person views in an incredibly cinematic, yet totally immersive way. 'Moving camera angles combine the advantages of a *Doom* style game with the filmic quality of third person view points' explains Spencer. 'It allows the player to see and "feel" the actions and reactions of their own character'.

But updating familiar gameplay clichés is not Spencer's main concern. It is obvious that he has more on his mind than creating a decent *Doom* beater. 'The next step is to create games which combine exciting gameplay and realistic graphics to produce a truly adult experience - and I don't mean pornographic. To take this step will require games that not only entertain, but touch on real life issues and experiences. When men and women can go down the pub and talk about what happened to them in a game without boring the pants off everyone else then the medium will have begun to mature'. Real life issues and experiences discussed down the pub? Now that would be an achievement.



He's back. And he's got some interesting stories to tell. **Edge** catches up with 3DO's Trip Hawkins in California, owner of both the games industry's sharpest mind (so many believe) and its sharpest tongue (read for yourself). So watch out Sega, Sony, and Nintendo...

Mark Koehler




Trip Hawkins remains one of the games industry's brightest sparks. He's an illuminating visionary, a brilliant marketer, a shrewd businessman, and a complete pain in the arse (as far as Sega and Sony are concerned, anyway). Why? Because he's telling everyone who'll listen that the 32bit generation is dead in the water. And now, riding high with $70 million in the bank and a sweet deal with Matsushita (the biggest consumer electronics company in the world), he intends to prove it with M2 and a whole new range of 64bit games.

Despite never supporting The 3DO Company's original 32bit games platform (it was never going to take on PlayStation and survive), **Edge** has always admired and respected Trip Hawkins. The games industry needs him. And the following interview offers a piercing look into his unique (and, to many, exceedingly controversial) point of view:

## Winner or loser?

**Edge** Most people probably still think of The 3DO Company as a casualty of the hardware wars, and as a very troubled company. How close is this to the reality of the situation?

**Trip** Well, at the end of last week we had more than $70 million in cash in the bank, so we're actually one of the best financed companies in the games industry. But it's true that a lot of people probably don't realise what good shape we're in, or what changes have been made at 3DO. It's been a very significant transformation.

**Edge** So what kind of company were you before this transformation, and how is it different now?

**Trip** If you look at what we were doing before, we were in what we call the 'Field of Dreams', with the idea being, 'If you build it, they will come.' Well, the flaw in that type of business model is that you spend a lot of money building 'the Dream' and then you're depending on someone else to manufacture the hardware, manufacture the software, and get it all sold - and then you're going to sort of rip off the royalties. And that gives you two problems: one, you've got all your eggs in one basket; two, you don't have control of the basket. So it doesn't really work. Even if you're very lucky, it's still not a safe way to run a business.

The other thing we figured out about the whole 32bit generation was that there wasn't really any way you could do it right. It will never be mainstream. Coming off of the success of the 16bit market and coinciding with the changes taking place in the PC market, I think what the consumer will ultimately prove is that 32bit wasn't different enough, wasn't better enough and wasn't cheap enough to be a big product category all by itself. This sounds strange, but it's nothing uncommon to the PC market, where certain generations of processors have been skipped, like the 286 processor, which was never a big deal.

**Edge** So what's wrong with 32bit?

**Trip** The feedback we've received through focus groups with consumers who have decided not to buy any 32bit systems indicates that they don't recognise a dramatic difference in the quality of the graphics over 16bit systems. And I think the reason for that is that, in terms of 2D graphics, there isn't a dramatic difference, and in terms of 3D, 32bit machines aren't good enough to do the job properly.

When you start moving the camera perspective in a 3D game on a 32bit system, you don't have the features you need - like MIP-mapping, filtering and transparency - and so, as you get closer to the images, the pixels get big and blocky, there are problems with crossing pixel boundaries, etc. If you compare *Super Mario 64* to *Sonic Extreme* on Saturn, you can really see the difference. So over the next few years, 64bit will really be a distinguishable leap forward for consumers, they'll feel immersed in a 3D world which they could never get from 32-bit.

And although we were the first people in the 32bit market and the first people out, it doesn't matter because the problems are generic and every single company - be it Panasonic, or Sega, or Sony - that has manufactured and sold a 32bit format, has lost money on it.

**Edge** But you're talking about Sega's and Sony's 32bit efforts in the past tense. Surely that's a touch premature?

**Trip** Well, they can keep trying to sell them, but consumers are becoming aware of this thing called 64bit. Certainly, Nintendo's going to drive that awareness, then Matsushita's going to help drive it. The consumer's also becoming aware of technologies like DVD and they're aware of the Internet. If you look at consumer interest in those three things and then you look at 32bit products that don't deliver them, it means in all likelihood that this year will be the peak for 32bit and then it will decline fairly quickly.

**Edge** You're saying that the lure of even better technologies is keeping 32bit down?

**Trip** The fear of obsolescence has always been a major factor in consumer electronics. But with the 8bit and 16bit consoles, with prices at $100 or so, the consumer didn't have such a problem with it. Besides, Sega introduced the Mega Drive in Japan in 1988 and it wasn't until 3DO's product announcement in 1993 that anyone even talked about 32bit anything. So there was about a five-year period where the consumer didn't have any fear of obsolescence. They could spend their $100 and feel safe. But then, even before the first shipment of any 32bit machines, Nintendo was already talking about its 64bit product. It announced it three years before it shipped.

The industry climate has changed considerably now. Consumers are now aware of new technologies and new machines a long way ahead of time. So if you talk about prices of

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more than $100, they start to get really nervous about the investment.

This is a market category where the consumer wants to feel cool, but it's also a market where parents who are buying something for their kids don't want to waste their money. Technology in some ways is moving too quickly for the consumer and they're kind of angry about it, so they've maybe shut down their interest in purchasing a little.

**Edge** So how can the industry change this? Surely, you're not saying that it would be better if technological development slowed down?

**Trip** No. I think that what will start to pull us out of that as an industry is when you harness together 64bit computing, DVD and the Internet in one product. That's a product that a much, much larger audience will be interested in. It's a product that also transcends this issue of obsolescence because nobody thinks of the Internet as being obsolete overnight – quite the opposite. Nobody thinks of DVD as being obsolete: they think of it as being a movie format they'll watch for the rest of their lives. The game format within the equation, even at 64bit, is still somewhat exposed to that issue, but if it's just a feature of something a consumer is going to buy for other reasons, then they're not as concerned about it.

**Edge** And you don't see this technology being immediately superseded by 128bit?

**Trip** It's going to be a while before you hear anybody talk about 128bit processors because there's no compelling reason to go to 128bit. So even Intel in the PC market will be using 64bit processors for the foreseeable future.

## What went wrong?

**Edge** That all sounds very sensible and well thought out. So why did you launch a 32bit machine in the first place?

**Trip** Simple. We know this now, but we didn't know it then. If you go back to 1990, that's when I cut the big publishing deal for Electronic Arts with Sega. I knew that deal would put EA in good shape for the rest of the 16bit generation, but I was actually really concerned about where the industry was going to go after that.

I looked at the market and thought, 'Gee, the PC is not going anywhere' – because at the time, nobody was talking about audio/video features on the PC, it had very poor processor performance, and poor graphics. It didn't have the right sound capabilities and it didn't have multi-user capabilities. There was no Internet. The PC market generally looked pretty sleepy.

In the console market there were these machines that ran very expensive cartridges, had very little capacity, couldn't really do very much and were also lumbered with very Draconian business models. So it seemed like a good time to try and do something about that.

**Edge** So what went wrong?

**Trip** I think what 3DO overestimated – what I overestimated – was how good 32bit technology would be, how easily consumers would digest the value of it, how easy it would be to develop for, and how much you could get out of CD-ROM technology and digital video. You just go right down the line. I overestimated it all – and I have to say that Sega and Sony blundered right into the same mistakes a year or so later.

Then what we got was a lot of savage criticism of CD-ROM for being a slow and inept technology, developers complaining about how much more it cost to write for, the video quality not being good enough, consumers bemoaning too much emphasis on video and not enough on gameplay. But I don't think these things were specifically 3DO's problems; I think everybody fell into the same boat.

## What I overestimated was how good 32bit technology would be... I overestimated it all




Then if you go back to when Nintendo announced that Ultra 64 would be priced at $250 – that was the fall of 1993 – they were assuming that all these 32bit machines would be $500 and sure enough, when Sega and Sony introduced in 1994, they introduced at $500. Now, here we are less than two years later, and they're at $199. Well, the reason they're at $199 is not because of production economies; the reason they're at $199 is because they can't sell them at a higher pricepoint.

**Edge** But sales have picked up since the price drops by Sega and Sony to $199.

**Trip** Even at $199, everyone has found that the volume just isn't what they hoped it would be. In terms of what the technology can do, you would expect that 32bit at $199 would be doing about the same numbers as 16bit was doing at $149 or $129, but it's not even remotely close. At this stage, the 16bit market was doing about 20 million units a year and was well on its way to achieving an installed base of 50 to 60 million. 32bit isn't even close.



**Edge** Nevertheless, Sega and Sony do seem to have made a better go of 32bit than 3DO did.

**Trip** It depends how you want to define better. Sega lost $600 million last year.

**Edge** Okay, in terms of units sold they've both done significantly better.

**Trip** Sony had the benefit of coming in last, so they could see all the mistakes that Sega and ourselves had made. They also came up with a very nice product, but then if you come in later you can use later technology, so they were able to utilise a RISC processor that was further into evolution than anything we'd used.

I think you have to look at Sony's overall execution and say they did a pretty good job all across the board. They were certainly better at marketing the product than Panasonic were with 3DO, but there again they had the monolithic model, they were able to control all the factors within one company. Having said that, Sony has lost money. They've lost a lot of money.

**Edge** What about Sega?

**Trip** Sega had the advantage of having a very strong brand – arguably the best videogames brand in the world. They've managed to screw that up now, but it was, at one stage, an advantage. They also had some very strong coin-op properties.

**Edge** 3DO never had strong software, did it?

**Trip** 3DO was a start-up company, so we started out at ground zero and came up with a different concept about how to do this business, one which was certainly novel and which a lot of people

were very intrigued by. That's why a lot of companies signed up to support it. But I think, in retrospect, it doesn't work very well if you have a sort of patchwork quilt with these guys doing the hardware, and these guys doing the software, and these guys managing the licensing program. It just doesn't work.

**Edge** So what's the right way to do it?

**Trip** What you need is a company that's a driving force: a company that makes, markets, and sells the product, and also supplies enough of the key software to really get the format going until the thirdparties come in. We've learned that lesson. Matsushita's learned that lesson, and that's why the business model for M2 is much more along those lines.

**Edge** Do you think that Sega and Sony have done as well as possible with 32bit, given your belief that 32bit is fundamentally flawed?

**Trip** Possibly. I guess what I'm trying to say is that if 3DO, Panasonic, and Goldstar had wanted to lose as much money as Sega and Sony have lost, we could have sold more machines.

**Edge** Would more hardware licensees have helped the 3DO cause?

**Trip** We were certainly hoping for that. In retrospect, the timing of how we did the whole thing was off course. We put the hardware in the market prematurely, before there was enough software ready. The reason that happened is that we were way too dependent on thirdparty titles and the thirdparties were late. So once we got that out of kilter, Panasonic wanted to launch the hardware anyway, the software companies didn't care if they did or if they didn't, so everything was out of sync.

I think that's why you now see format companies much more focused on launching platforms without depending on thirdparties. You have Sega, Sony, Matsushita, and Nintendo. Basically, these four companies are all pretty strong and pretty self-sufficient – they don't really need thirdparties, particularly if you tie Sony and Matsushita up with DVD, where they have a lot of movie software. Then, in terms of having a killer app, you have a lot of movies available and that takes pressure off games.

**Edge** Sony wasn't known as a game maker when it first launched PlayStation.

**Trip** I think what Sony initially did was to try and do what 3DO did, which was sign up tons and tons of companies and tons of product. Now they're beginning to realise that it's not a particularly good strategy. Generally, thirdparties' schedules are unreliable and their quality is also very unpredictable.

Sony knows now that by allowing so many products to get started in development ,everyone's going to lose more money and have more resentment about paying licence fees to them. At E³, the rumour was that Sony was going around telling licensees that although there are 350 products in development, they're only going to approve 150 of them for the US market. They might find they're a little bit late trying to control the situation.

**Edge** When did you arrive at the realisation that the original 3DO machine and business model were not going to work?

**Trip** Things were difficult from day one because the launch timing was messed up. Throughout 1994 we weren't spending a great deal on it – and neither was Panasonic – but we were still trying to be resourceful to try and get it going. In early 1995, we realised that there was no way we were going to make it work and that it was better to withdraw.

**Edge** Do you think you got enough support from Matsushita, Sanyo, Goldstar, and the rest of your hardware licensees?

**Trip** I think everybody gave it their best effort. The problem is that if the structure is fragmented, everyone's waiting for everyone else to do it. It's hard to work as a federation.

**Edge** So if you could go back to the inception of the 32-bit project, would you do things differently? Or would you not do it at all?

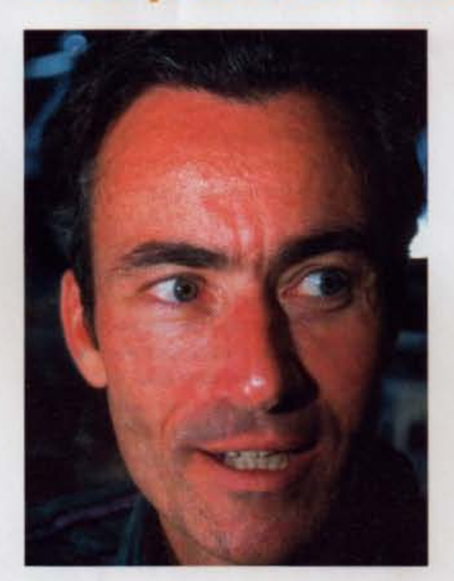
**Trip** With hindsight, what I would have done is shifted emphasis over to PC software, and then tried to take the high ground by pushing for sound and graphics on PC.

If you look at a company like Origin Systems, they were relatively small and their strategy was to support real high-end PCs, and what happened was that the market grew up to their level and they expanded tremendously. That would have been the right thing for me to do – just not worry about the console market for a while, let the technologies mature a little bit.

It's like a lot of engineering. You have a new idea, you build it for the first time and in the process you rethink things, fine tune things, until eventually you have to throw it all away and start all over again. I think that's what the industry's just gone through with 32-bit.

Now we're looking at DVD vs CD-ROM, MPEG 2 vs MPEG, 64-bit vs 32-bit. It's like we had the right core ideas but they weren't executed perfectly. This time around I think you're going to see things done right and you're going to have far greater mass-market potential.

## We've got $70 million cash in the bank, so we're actually one of the best financed companies



## Buckets of cash

**Edge** Going back to your opening comment, how did you land $70 million in the bank?

**Trip** We stopped spending money on the 32bit market a year and a half ago, so that helped. But then, two years ago, we started working on M2, so we were running up a pretty good expense for that, but we weren't getting any revenue out of it.

Once we realised we didn't want the 'Field of Dreams' model, we decided we had to do a couple of things. First, any market we're in, let's have a revenue-driven approach to it – let's find a customer who wants to pay cash. Second, let's not put all our eggs in one basket. Let's make sure that when we design a technology we can leverage it across more than one market.

So we started to see that this 64bit technology that we were developing was in sync with where console gaming was going, with where DVD was going to go, with where Internet boxes would go, where the PC was going, and that all four sectors could include products using the same core technology.

We went to Matsushita and said, 'Here's how we want to change our approach to the business,' and we sort of did a trade with them. If you look at the 32bit model we had with them, we essentially gave them the hardware technology but we kept the software licensing program. That drove them crazy, and it didn't work for us. So what we've done with 64bit is say to them: 'How about if we give you control of how you bring the technology to market, and let you run the software licensing program, but we keep the rights to the hardware?'

The $100 million deal that we struck with them means that even if we had no rights to do anything else, M2 would still have been very profitable for us. But the key is that M2 is a compatibility format, so if I take a disc and stick it into a player and it plays, that means it's M2 compatible. In the consumer game market, only Matsushita has the rights to that API.

They have no rights, however, to any derivative works. So what that means is that we

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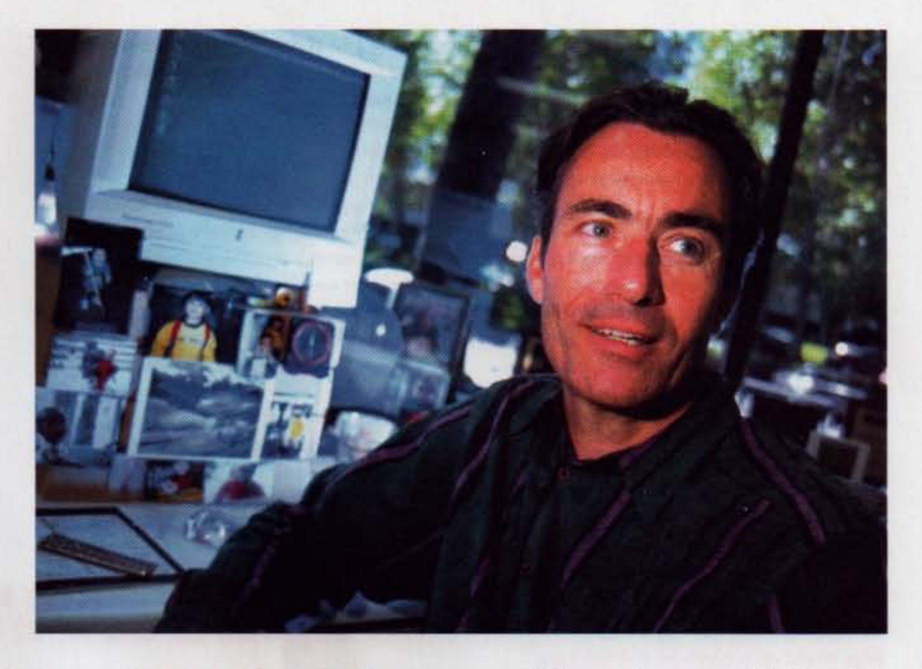
could go in and fiddle with a few bits, make something M2 prime, and we would have the rights to that. So in terms of deriving an Internet box or a PC chip or a downstream next-generation version of M2, we own all the rights and they don't.

**Edge** It sounds like a great deal for you. How did you get Matsushita to agree to it?

**Trip** Well, they don't really understand how to deliver this kind of technology on their own, so they depend on a company like us. And they also had to make a decision on whether to be partners with us or to try and find someone else.

We were the best choice in terms of our ability to execute the technology and the kind of financial deal they could make with us. They got what they wanted, they got the technology they wanted, and they got control over the parts of the business they wanted. Plus they're a very, very large company, so for them to make this kind of investment is not a big deal for them.

What we do from this point on is treat this deal as the anchor for the hardware business and we start doing other things like PC chip deals and spinning off other businesses like MPEG encoders and arcade boards.



**We are way down the line on [M2 software]. Some M2 titles are now good enough to show**

**Edge** Has the $100 million deal wiped out the losses you made on the original 32bit project?

**Trip** No, from 1991 to 1995 we lost a lot of money, well over $100 million, so we have what is called an NOL [net operating loss] carried forward. It means that we weren't clever, we lost a lot of money, but it also means that we have a big tax benefit if we ever make any money, so we won't be paying any taxes to speak of for the foreseeable future.

## Games for all platforms?

**Edge** What strategy do you have in terms of selecting which formats to publish on?

**Trip** We'll publish on any format that we think will have a meaningful installed base and holds some synergy for us – and if we're not going to publish our games ourselves, then we'll licence on the rights to some other publisher. We recently did a deal with Acclaim and they're going to publish three of our titles on the PlayStation and the Saturn.

**Edge** Why not publish yourselves on PlayStation? It's surely the next-generation market leader...

**Trip** Put it this way, if I thought that the PlayStation was going to be a really large market and I thought it was going to extend far enough into the future, then we would publish for it ourselves. I don't believe that, so I'm happy to let somebody else have the rights and we'll just get some money out of it. We'd rather concentrate our resources on platforms that have a greater long-term value. We're using the M2 as a sort of launching pad for our 64-bit publishing. It's obviously a technology that we know quite well and, as a publisher, we have a unique licence with Matsushita – we're not subject to the same kinds of controls that everyone else is subject to.

So, should Matsushita be able to make a good market for M2, it would be a tremendous advantage for us. On the other hand, if they don't make a big market out of it, then we'll still have used it as a springboard to develop 64bit properties which we could then take to whichever platform the customer chooses. That could be a PC using a 64bit graphics chip, or a 64bit Sony machine, or the Nintendo 64, or whatever else.

**Edge** How far advanced has your game development reached for M2?

Trip We're way down the line on it. Some of the titles are good enough to show publicly now, although we haven't chosen to do that yet.

**Edge** And so far, your only definite publishing plans are on the PC and M2, is that right?

**Trip** Yes, well, those are the only ones we've announced. I would also consider the Internet as a platform in its own right, and we're certainly developing titles that are specific to that.

**Edge** How big a noise do you think you can make in the highly competitive PC game arena?

**Trip** I think we know how to make good PC software and to bolster that, we've bought New World Computing, the company behind *Might and Magic* and *Heroes of Might and Magic*. So I think we have some cachet in the market and we're making some stuff that is pretty good.

At the same time, we regard the PC market as a kind of tactical manoeuvre for us. It certainly doesn't make sense to me for us to show up in 1996 and say, 'Okay, we're here to make games for the PC,' and then just sort of march in and push all the other people out of the way. I don't see that as the right approach at all. I just see it as one of the many arrows in the quiver.

In The Art of War, what Sun Tzu says is that if an enemy's army is at the top of a hill, you should never go and attack that hill. Instead you should go to the top of another hill and try and convince him to attack you.

The PC market is a fairly good hill. It's a nice-sized hill, but it's saturated with competition. The 32bit hill has turned out to be nowhere near as big as everyone hoped and, to compound that, it's also pretty saturated. The 64bit hill is way off in the distance – nobody's really focused on it yet. And, although it may look small, as you get closer it turns out to be really, really big. We want to be one of the first on that hill. We have the money, the technology, the talent, and the time. So we have a good shot at it.

**Edge** How easy was it to explain to your shareholders that you'd attacked the wrong hill and lost a load of money, but that you now know which hill you want and could they bear with you while you go and attack that?

**Trip** Well, of course, the make-up of the shareholders has changed over the years. Now the two largest shareholders in 3DO are Matsushita and me. I've put more money into 3DO than anybody else. Generally, I would say that there was a lot of disappointment because we went out and said, 'Hey, we're going to try and set a standard with this thing and we're going to try and humanise many of the more unhelpful aspects of this industry,' and a lot of people

thought that was great, but it just wasn't to be. So there was a lot of disappointment about that and it caused a lot of people to jump off the bandwagon.

Frankly, at this point, I don't expect a lot of people to jump back on because I don't expect a lot of people to understand what we're doing, so we'll just have to go out and prove it.

**Edge** In the gaming market as it exists today, how do you think 3DO ranks against other publishers?

**Trip** If you look at a traditional game company like Electronic Arts, they're obviously much more mature than we are so they have tremendous brand strength, which we don't have, and tremendous distribution power, which we don't have. But on the development side, I honestly think we are comparable in terms of our ability to make state-of-the-art games. The reason I say that is that although Electronic Arts probably has around 800 people in development and we have just less than 300, all of ours are focused on next-generation products and platforms. EA probably has a lot of their people doing clean-up duty on older generations. So, in terms of looking forward, we're about as big as anyone out there.

But then again, software is just one component for us. On the hardware side, we're going to continue to search for more and more ways to use our technology to leverage special, strategic relationships with manufacturers.

Frankly, over the next five to 10 years, I really don't look at Sony and Matsushita that differently. They're both huge companies and they're both going to be major factors in the market and I'd like to have a good relationship with them both.

Maybe the way I get a good relationship with Sony is by making a bunch of Internet stuff that they want to have run on their consoles, and maybe that's a way for me to convince them to let me have a better licensing rate. But I certainly don't want to be just another thirdparty publisher.



## Well you know... in the long run I don't think the PC market is a massmarket proposition

**Edge** Despite your obvious desire for dramatic diversification, is it safe to assume that straightforward retail sales of PC games will be the biggest part of your business for at least the next year?

**Trip** Yeah, definitely.

**Edge** But that's not a situation you see as long term for The 3DO Company?

**Trip** Well, you know, we'll take the yield from whatever piece of the market offers it. But in the long run, I don't think that the PC is a massmarket proposition.

Even the most recent research suggests that there are a lot more households that don't want a PC than there are that do, and we're starting to get to a point in the United States where almost every home that has an office worker has a PC and the households that don't have office workers don't have any interest in PCs because they're expensive, they're hard to use, and they're mainly for business applications.

What those households are interested in is entertainment. But amazingly, they're also interested in the Internet because every time they see an ad now there's a Web address on it and they're beginning to feel that they're missing out. But they still don't want to spend the money or deal with the complexity that comes with a PC. That's why I think the next really big growth place for this market is when you can hook these three things – DVD, 64bit games and the Internet – together. And, by the way, there's no reason why this can't be a $299 product in two or three years' time.

**Edge** So how far away are we from an integrated product boasting DVD, 64bit gaming and Internet access at $299?

**Trip** Not far at all. If you look at DVD, it's coming out late this year or early next year and the introductory prices are going to be as low as $399 to $499. We also hear from Japan that the price will come down by about $100 a year, so that means you're quickly down to $299 or less.

If you then want to add a game format, then even though it boosts the manufacturing cost, you're also adding a royalty-bearing feature to offset that, so if you want, you can keep the price of the hardware the same.

So, by 1998, if this system has a higher price than $299, it will only be because the manufacturer wants to make more profit. It won't be a cost issue.

**Edge** If we look around at the current games market contenders, Sony, Sega, Matsushita, and Nintendo, would you agree that Sony and Matsushita – by virtue of the fact that they are both big consumer-electronics companies and not just game companies – are the two that are best placed to deliver something like the DVD/games/Internet box that you've been referring to?

**Trip** They're the only two, I think, realistically, Matsushita's real shot at becoming a strong supplier of a game format depends on how well they can integrate DVD technology with M2.

**Edge** They don't seem in any rush to launch M2, or even talk about it.

**Trip** That's true and let me tell you why that is. Over the last five years, everyone that has brought a new format to market has lost money – in most cases a helluva lot of money. So, whereas the rule used to be that if you have a new technology you should rush it out, now everybody realises that doesn't work. Matsushita realises that it's not the timing but the quality of the launch that counts. You have to offer the right performance at the right pricepoint, and you have to have the right marketing and the right software from day one. And if you don't, you're better off waiting until you do.

Also, as a consequence of Matsushita waiting, they have been able to work with us to improve the product, so that relative to what the hardware spec was a year ago, it's now a very different machine, offering a much improved level of performance. And to us it sounds as if they're being very aggressive with their plans for pricing, their plans to move to DVD, and their interest in the Internet – so they're thinking about all the pieces already.

**Edge** What do you think are the chances of a 1996 Christmas launch?

**Trip** Again, there's nothing official as yet. Theoretically, it could be shipped this year, but there wouldn't be enough software to make it a really good launch. There will be enough by, say, spring next year.

**Edge** And is there any chance that it would be a DVD-based box straight away?

**Trip** No, in that timeframe you'd have to go with a quad-speed CD-ROM drive because the precise DVD spec was only finalised very recently – there was a bunch of copy protection issues that had to get sorted out. Anybody trying to launch a DVD game system would be looking at probably early 1998 as a reasonable launch date.

**Edge** So the M2 machine that emerges next year will be a CD-based platform going head to head with Nintendo 64.

**Trip** That's a reasonable way of looking at it. Another way of looking at it is to say that it isn't going head to head with anything, that it's a proving ground in which you build up your software base, and you work out some of the kinks in manufacturing in preparation for the launch of a DVD version, which is your real shot at the big time.

**Edge** Apart from 3DO, where will the strong early titles for M2 come from?

Continued

**Trip** Well. Matsushita has a deal with Williams. They can do basically whatever they want with the Williams product line on M2. They're also working with other coin-op companies in Japan. They're doing some stuff with Konami, they're doing some stuff with Capcom.

Their strategy is to focus on coin-op titles and I think that between what we're doing and what they're doing – plus the movie component that will become relevant with DVD – that's a lot of software. There are additional thirdparties above and beyond that, but that program hasn't really got into top gear.

**Edge** So the more traditional game publishers, the Electronic Arts and Acclaims, aren't really on board yet?

**Trip** They're not all on board and they're certainly not all running at full speed, but a few are doing some development.

**Edge** After hearing quite a lot about M2 from The 3DO Company a year or so ago, we're now in a period when it seems to have fallen off everyone's agenda. When are you or Matsushita going to start making some noise again?

**Trip** Well it's funny because from our point of view you have to remember that there was a time when we were spending money developing this thing called M2, but we weren't making any money from it, so we were out promoting it like crazy and looking for a customer. Once we had a customer and $100 million in the bank, we thought: 'Great, we can shut up now.'

Plus there are now some limitations on what we can say. It's not our privilege to go out talking about the details of the product any more because it's their product. So, for instance, the changes that I mentioned that have been made to the spec in the last 12 months, it's up to them to talk about them in any detail.

Also, like I said, they're in no rush. They'd like to know more about Sony's 64bit plans, they'd like to know more about where DVD's going and they'd like to digest the whole of the Nintendo 64 launch a bit more. Meanwhile, they're keeping their powder dry.

From our point of view, it would be great if M2 is a big success for them, but on the other hand, even if it's not, we will still have made a huge profit on it anyway and we're diversifying our software business no matter what happens.

**Edge** What would you do if you were running Sony right now?

**Trip** Where they really stand to make a lot of money is in the same place as Matsushita – on a DVD product that has 64bit gaming and Internet capabilities. So what Sony ought to be doing is trying to get that product to market as soon they possibly can.

They should be building up an Internet software franchise and a 64bit optical disc business that's multiformat, not tied to their own machines. They're doing elements of all those things, but I don't think they're in as big a hurry to get to the 64bit DVD stage as they should be.

## 3DO and Sega?

**Edge** Wouldn't M2 sell a lot better as a game machine if it had a big Sega badge slapped on it?

**Trip** Well that's an interesting question for Sega because they're literally haemorrhaging money at the moment. And because of all their problems they've either shut down or restructured almost all of their international operations. And I think you've now got to question whether or not Sega still has the ability to be a major supplier of a new format.

Personally, I find it shocking that Sony outperformed Sega as much as it did. In the U.S., those two companies have had virtually the same price point, the same product features, and similarly attractive software libraries. Sega even had a six-month head start. Yet Sony outsold them by a ratio of about 5 to 1.

I think that what happened was a lot of consumers got fed up with Sega pulling the rug out from under their hardware so many times. You know, they were told, 'Buy the 16-bit, now the Sega CD, now the 32X, and now we want you to buy the Saturn.' And everyone finally ended up saying, 'Screw You, Sega!'

It's going to be tough for Sega from here on in, particularly as they're not proving to be very good at designing their own hardware.

**Edge** So why doesn't Sega dip out of making game boxes and license their brand to Matsushita for M2? Doesn't that make sense for them?

**Trip** It makes sense to me, that's why we tried to do it! For most of last year Sega was interested in doing that, but at the end of the day I think Sega's corporate ego is still too big to allow them to partner with anyone. But I don't think that means they won't do it in the future.

I think a lot depends on how they perform financially over the next year and then do they have the nerve to introduce their own format again? They like controlling their own business. They don't like the idea of having to be partners.

It's the same thing with Nintendo, although Nintendo is in a much stronger financial position than Sega. Plus, Nintendo instinctively wants to live at the bottom end of the market, that's one of the reasons they've stayed away from an optical disc. Even now they have a fairly negative attitude about CD-ROM and DVD because they don't think they can control it. They've got the patent on their security chip, but unless the software's delivered on a medium that connects through an edge connector – where you can use that chip – they get worried about somebody messing with their licensing program.

They're also not that worried about any third-party software market. They want to make a really great children's toy, and they want to sell a bunch of their own software for it. You have to respect the purity of that model.

Sega is a very autocratic company. It's really driven by [Hayao] Nakayama and whatever he wants to do, but I think there's a pretty good chance that in the next couple of years he'll finally throw in the towel and say, 'Screw it, let's just be a really great software company.' Then they'll decide who they want to partner with in hardware and make sure they get a good deal for the use of their brand. In many ways the Matsushita and Sega relationship would have made a lot of sense because you would have had Sega's marketing acumen and software plus the manufacturing power and technology of Matsushita backing it up.

**Edge** How far did negotiations get?

**Trip** The deal was virtually done. It only fell apart at the last minute.

**Edge** Why?

**Trip** Ego – and not just Sega's.

**Edge** Is there any chance of the deal being resurrected at all?

**Trip** I don't think these sorts of things are ever dead – particularly with Japanese firms. You just have to sit back for a while and see how the marketplace develops, how it falls into place.

Sega has a lot of interest in DVD, but some of the research we've done suggests that if a consumer goes out to buy a DVD player with gaming capabilities, this person is going to focus on the DVD brand, and not the gaming brand. I've heard many consumers say that they wouldn't dare buy a Sega- or Nintendo-branded DVD player. They think that the movie quality would be lousy. And while that may not be the case, it's certainly the perception.

And if DVD does turn out to be the Trojan Horse that drives the game business forward, it benefits Sony and Matsushita enormously and it becomes a question of how Sega and Nintendo fit in. E







Andrew Spencer Studios uses ellipsoids rather than polygons for all the graphics in *Ecstatica 2*. The result is some amazingly lifelike characters (left) and lots of strange 3D 'textures' (right). 'Triangles tend to make robot-looking figures,' explains Spencer. 'Ellipsoids are more human'

# Ecstatica 2

**If you thought polygons were the only choice for 3D graphics, think again.** Andrew Spencer Studios, working on the sequel to innovative PC adventure *Ecstatica*, has different ideas. Edge meets the London-based team to find out the truth about ellipsoids



**Andrew Spencer: 'Our aim is to combine high-quality graphics with strong gameplay'**

| | |
|---|---|
| **Format:** | PC CD-ROM |
| **Publisher:** | Psygnosis |
| **Developer:** | Andrew Spencer |
| **Release:** | Jan '97 |
| **Origin:** | UK |

It's ironic that a game with the title *Ecstatica 2* should come out of one of the scruffiest, most charmless parts of London: a city positively littered with scruffy, charmless parts. But here, in an unfashionable stretch of fashionable Islington, sandwiched between two prisons, is Andrew Spencer Studios: a highly innovative development team obviously completely unperturbed by their less-than-glamorous surroundings.

Although it's a small set-up at the moment – with only five in-house employees – things started even smaller. Spencer spent years working single-handedly on the engine behind the original *Ecstatica* (see **E13**), and when the actual game was ready to go into development, he recruited just one helper: film animation expert Alain Maindron. Together they created what was at the time a visually stunning and complex game – an *Alone in the Dark*-style arcade adventure with dozens of locations, dynamic camera angles and beautifully animated characters.

Although it has aged somewhat ungracefully, *Ecstatica* had one facet which is still notable: its use of ellipsoids to create characters and backgrounds, rather than polygons. Polygons are, of course, constructed from triangles, so games featuring them always look angular (unless you use thousands, impractical in any game where frame rate is a concern, or use plenty of Gouraud shading). Ellipsoids, on the other hand, are, by definition, circular rather than pointed.



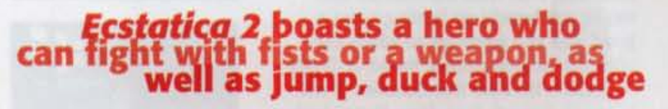
**The Andrew Spencer Studios team (from left to right): Neal Petty, Andrew Spencer, Marcus Wagenfuhr, Ken Doyle and Dave Lowry**

But what are the advantages of using such a unique method? 'Its the question I always get asked,' sighs an introspective **Andrew Spencer**. 'The main advantage

is the organic-looking characters. Triangles tend to make hard, robotic-looking figures, whereas ellipsoids can be used to create rounded, more human alternatives. Ellipsoids can also be more efficient because you can make a much better-looking character out of fewer shapes.'

The artists working at Spencer's studio also point out that ellipsoids are easier to animate smoothly, giving characters grace and deportment missing from their polygon equivalents.

Because of these benefits, polygons have been shunned again, and the whole ellipsoid engine is now being improved for the much more graphically impressive, hi-res sequel. *Ecstatica 2*, like its predecessor, is an RPG-style arcade adventure. The object is to kill the demonic sorcerer and his army who have overtaken your castle, and then free your betrothed from their satanic clutches.




On the way, you also have to find and put together pieces of the Elder Sign, a powerful talisman that has been smashed by the evil gang.

In terms of genre, the closest modern reference points are probably *Time Gate* and *Time Commando* – all three games feature pre-rendered backgrounds,







**The combat system is more comprehensive in *Ecstatica 2* than in many other PC arcade adventures. Consequently, fights are more tactical**



**Andrew Spencer Studios is actually a rather small office in downtown Islington. Not the most pleasant area...**

dramatic camera angles, and a combination of adventure gaming and arcade elements. Like *Time Commando*, *Ecstatica 2* also boasts a hero who can fight with fists or a weapon, as well as jump, duck, and dodge. However, it looks as though the player in *E2* will have much more flexibility during combat than in *Time Commando*. Holding down Alt or CTRL in conjunction with the arrow keys provides a huge range of defence and attack moves, whereas in Adeline's effort, fighting was just a case of standing there and repeatedly hitting people – not particularly engaging.

Of course, what separates *Ecstatica 2* from its contemporaries, and makes it visually unique in today's market, is again that innovative use of ellipsoids for all characters, backgrounds and objects. It's a method that has forced the artists to be much more creative, and has given the title a truly individual balance, style and twisted realism. It will come as a shock to polygon worshippers everywhere, but ellipsoids are capable of creating a much greater degree of 3D realism, especially when it comes to scenery. Much of the action takes place in a huge castle and instead of using flat textures with the appearance of stone for the wall and floor surfaces, the artists have used small ellipsoids to create a convincing cobbled look with a real appearance of depth.

Spencer is cagey about exactly how ellipsoid graphics are created, but he refers to his proprietary editor, which uses fractal algorithms to generate images. 'All the objects are algorithmic, which means there's a little bit of programming in each one,' he explains. 'Trees and plants, for example, are fractals with a bit of randomness built in and a few rules to follow. Ferns are told

Continued next page

Continued

to get lighter toward the end, plants are told to develop stalks and then sprout into flowers. In a sense, the program, written in C, grows the object rather than builds it.' The resulting foliage is not only very three-dimensional but also peculiarly organic and extraordinarily beautiful. Lifelike and complex, it's a look that belongs on the front cover of a Future Sound of London CD.

Improvements over the original *Ecstatica* are not just confined to graphics. The first game contained around 80 rooms or locations; *Ecstatica 2* has nearly a thousand, some with two or three camera angles, making for an impressively diverse range of scenery. Away from the main castle setting, there are catacombs, dungeons, gardens, even villages, all explorable by the player.

**The original *Ecstatica* had around 80 rooms: *Ecstatica 2* has about a thousand**

There are also around 35 characters, from barbarians and wizards to orcs and giant spiders – all of which have their own skills and individual strengths. Some are difficult to kill but don't inflict much damage on the player; others are more lethal but will die after just two hits. Furthermore, the differences between the enemies are not just based on which type they are; according to Dave Lowry and Ken Doyle, who designed the characters, no two individuals have quite the same stats. It's a pretty sensible attempt to make the fighting in *Ecstatica 2* more realistic than it has been in many other PC arcade adventures.



**Cinematic camera angles and dramatic animated sequences give *Ecstatica* 2 plenty of filmic atmosphere. A good example is this image of the hero getting chucked off a high battlement by two ogres**





**Forests are filled with beautiful plants and incredibly realistic ferns. The flowers are randomly generated from a menu of attributes**

What the team have to get right, though, is the balance between adventure and fighting. Little actual gameplay was on show when **Edge** visited the design studio, but Spencer promises an array of logic problems and puzzles to keep the player entertained. These will have to be plentiful if the game is to succeed: Adeline discovered to its cost with *Time Commando* that relying too heavily on fighting is not a good idea in a game genre which can't offer the visceral combat found in *Quake* or *Tekken*. It's clear that *Ecstatica 2* will have more depth than *Time Commando* – the adventure element sounds more complex and players can pick up an array of objects (some of which are needed to solve puzzles), not just weapons. However, it is also clear that the team are not aiming for a totally RPG-like experience (there is, for example, no inventory, so the lead character can only hold one object at a time). Hopefully the gameplay won't be compromised to please all comers.







**Many new ideas for *Ecstatica* 2 were no doubt born during extended pool sessions**

Another potential problem stems from the ellipsoid-based system itself. Although the PC is comfortable with it, later platforms might not be so amenable. 'The PlayStation is going to be particularly difficult,' admits Spencer. 'The hardware is geared toward triangles, not ellipsoids. Furthermore, ellipsoids are mostly software driven, which the Playstation doesn't really like. Ellipsoids and the PlayStation don't go together.'

Despite these concerns, Andrew Spencer Studios is a team to watch. It's very rare that in the middle of a huge videogames movement (in this case, polygonmania), one company should go off on its own path and create something visually at odds with everything else around. Although at first glance *Ecstatica 2* doesn't look that different, it's a game which has developed in isolation from current trends. There's no *3D Studio*, no *SoftImage*, no FMV – everything you see onscreen has been developed in-house. If the gameplay matches this individuality and spirit of innovation, *Ecstatica 2* could well be the product to bring credibility back to the PC arcade adventure. It's been a long time coming...

# Star Gladiator



**Capcom's take on *Toshinden* proves to have far more character than the average fighting game. But is that enough to give its System 11 conversion the edge in the beat 'em up arena?**




**Every hit and weapon slash in *Star Gladiator* is accompanied by a bright flashing explosion or a spectacular blurring speed trail arching in the wake of the laser-edged blade, with sound effects to match**







**Two of the larger characters in *Star Gladiator*, Vector (top) and Gamof (above)**

| | |
|---|---|
| **Format:** | PlayStation |
| **Publisher:** | Capcom |
| **Developer:** | In-house |
| **Release:** | Oct 25 / UK – TBA |
| **Origin:** | Japan |

Capcom's conversion of their own System 11 coin-op may not be the next great PlayStation beat 'em up, but it could just be the next best thing. For a start, it's the only forthcoming beat 'em up aside from Namco's *Soul Edge*, to be based around swordplay rather than the traditional handbags-at-ten-paces martial arts disciplines. For *Star Gladiator*, read Jedi Knights – the weapons here are ethereal 'force' weapons much more akin to *Star Wars* lightsabres than conventional cutlery.

Like *Toshinden*, the sword-based fighting is at a noticeably slower tempo than the swifter *Tekken* (30fps instead of 60fps) and comparable titles, with the range of the weapons compensating somewhat for the relative lack of rapid, close-in fighting. Controlled mostly by the four thumb buttons, there are two separate sword moves: a quick stab/slash and a more weighty, damaging two-handed swing – with different strokes triggered by the usual mix of D-pad presses and special move sequences.

The other thumb buttons give various blocks and kicks; multiple-key presses bring up a kind of glowing shield-state, and the shoulder buttons have *Toshinden*-style sidesteps and rolls as well as duplicate block buttons. All the similarities to the Takara game end when you take a look at the characters in *Star Gladiator*. Whereas *Toshinden*'s motley crew fitted into the standard *Street Fighter II*-derived quota of karate kids, little girls and stereotyped foreigners, *Star Gladiator*'s roster is far more inventive.

For a start, there's Saturn, a coneheaded green alien with some vicious bladed yo-yos, Gamof, a Chewbacca-like creature with a huge

**The lumbering Vector has a real mechanical feel, with his body parts spinning independently of each other**

laser-edged axe, and Vector, a gun-toting, bayonet-slashing robot soldier. But it's not the original design of the characters that impresses, it's the way their characteristics have been translated into gameplay elements. The lumbering Vector has a real mechanical feel, with his body parts spinning independently of each other and, for once, there some gunplay in a beat 'em up, as (by executing a 'fireball' special move) he'll level his gun and fire off a round. Vector also has possibly the funniest special move in the game – he lifts the other










**Vector sticks the boot into Gerelt (above). Different icons appear next to the timer logging victories by type – KO, ring-out and so on...**







**Star Gladiator's weapon based combat makes for some shattering impacts as hits connect**

fighter by the proverbials, throws them high in the air and shoots them mercilessly as they fall back down.

Rimgal, a man-size dinosaur reminiscent of the ones in Atari's *Primal Rage* beat 'em up, has an awkward two-legged gait which makes him one of the less agile characters in *Star Gladiator*. That's compensated by some quick tail flicks which put an opponent on the deck, some fire-breathing and an evil special move where he grips the other fighter's head between his teeth and swings them around.

Zelkin, a giant bird-of-prey, carries a twin-bladed sword but is just as effective with his talons. A special move lets him take briefly to the air before swooping in and launching another attack. The last 'weird' character is Gore, who has a large brain instead of a head, and who breathes toxic green bubbles. The remaining characters are far more conventional and, it would seem, far better suited to general play.

Hayato is your standard Oriental bloke with sword, the default all-rounder that every single beat 'em up seems to include as a matter of course. June easily fills the cute girl role and comes complete with high-pitched giggly voice and a deadly electro-frisbee in each hand. Finally, there's Gerelt, a European fencer in a hefty suit of armour who sports a decidedly Teutonic duelling scar and moustache combination.

*Star Gladiator*'s arenas look less impressive than its colourful fighters, but each one has at least one or two bits of animation, from flocks of birds and rotating radar dishes to hazy mist streaming across the surface of the arena. However, it's the well-designed characters and their wealth of spectacular moves that distinguish *Star Gladiator* from other PlayStation's beat 'em ups.

Supplementing the usual (arcade and Vs modes) play options is a Group Battle mode which pitches a randomly-selected set of fighters against each other in a 'winner stays on' process. It's hardly a ground-breaking feature, as SNK's stable of Neo Geo beat 'em ups (like the *King Of Fighters* series) did this sort of thing years ago, but it can only help increase the game's lifespan.

Perhaps a little too similar to *Toshinden* for its own good, *Star Gladiator* should at least have enough of interest to tempt, if not actually convince, anyone hankering for something different after they've exhausted *Tekken 2*. E




**The unfortunately-named Saturn and the fire-breathing dinosaur Rimgal (above) are two of the more unusual characters in the game**








***Star Gladiator*'s game camera moves smoothly between standard wide and close views, with the occasional high-angled shot to spice things up a little. The above level takes place on an elevator platform that rushes upwards as the fight goes on**

# Mr Tank

**Rebellion abandons the dodo-like Jaguar and turns its attentions to the PC with an unusual-looking tank game.**

**Rejecting sim authenticity for arcade-style gameplay, it could be the Nineties answer to *Battle Zone***

Sometimes it pays not to be too serious. *Micro Machines*, for example, is one of the most addictive racing games ever created, yet it has none of the complexity of, say, Geoff Crammond's *GP2*. Tank games, though, are usually taken seriously by developers. *Armoured Fist*, *Tank Platoon* and *M1A2 Abrams* are all serious simulations with real vehicles and real weapons. Only Big Red Software's *Tank Commander* tried to inject any humour into the genre, with sheep you could run over and levels given titles such as 'Frosty's Arctic Hellhole'.

No gap in any market remains for long, though, and Rebellion, responsible for *Aliens Vs Predator* on the now moribund Jaguar, is in the process of developing a light-hearted tank battle game, curiously named *Mr Tank*. Here, instead of having to drive a Chieftain across the Gulf sands, you choose a fictitious tank from several available and drive it around an arena, blowing up other players. There's a wide selection of weapons and plenty of pick-ups littered around. What there isn't – and this is typical for a videogame early in development – is a storyline. **Paul Topping**, Rebellion's marketing manager, told **Edge**: 'We're considering a futuristic sports setting. At the moment, though, we're working on gameplay. Which is more important, of course.'

In terms of gameplay, then, *Mr Tank* looks like a '90s version of *Battle Zone*, with the emphasis placed very much on the multiplayer mode. Owners of a four-plug joystick interface can make use of the quad-screen display, which allows four players to take part on one PC. Furthermore, the game will cater for eight players over a LAN. There's also the opportunity to team up against computer tanks or just fight each other.

Despite the multiplayer emphasis, there is a single-player mode: here, you get a set amount of time to destroy a given number of computer-controlled tanks. On later levels, enemies get more intelligent, and therefore harder to track.



**Explosions are often huge and impressive, engulfing whole sections of the arena**






***Mr Tank*'s bacgrounds are garish, to say the least. It certainly makes a change from all those *Blade Runner*-inspired sci-fi settings**

Graphically, the designers have sought to emphasise *Mr Tank*'s non-serious arcade feel by painting the game in a vast array of gaudy colours. The only arena **Edge** has seen in detail, provisionally titled 'The Shopping Mall', is basically a maze of multi-coloured shops and stores, all sporting beautifully designed names and ads. This extensive use of primary colours, plus the

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| **Format:** | PC CD-ROM |
| **Publisher:** | TBA |
| **Developer:** | Rebellion |
| **Release:** | TBA |
| **Origin:** | England |





**In multiplayer mode, players can either form teams to compete against computer-controlled opponents, or just gang up on other human competitors. Each player's tank has a totally different look: these range from the tractor-like (left) to the more HG Wells-inspired (right)**



**The novel quad-screen display allows four players to take part on just one PC**

abundance of icons, grafitti and tawdry humour (very unappetising ads for things like 'Cheesy Beef', for example, which stress, in graphic detail, the complete inedibility of the product), give the level an interesting 2000AD look, further distancing *Mr Tank* from realistic sims.

Also interesting is the use of sprites rather than polygons for the backgrounds and vehicles. Topping points out that this is to keep the speed of the game as high as possible (again emphasising that this is an arcade rather than a simulation

## The long list of multiplayer options should keep deathmatch fans happy

title), but sprites also allow the use of more colours. So that accounts for the rainbow-esque nature of the settings...

As for speed, the game runs at over 20 frames a second on a lowly 486, but this is in the visually underwhelming low-res mode. However, players with decent Pentiums and good graphics cards can expect a similar performance in hi-res.

Along with The Shopping Mall, *Mr Tank* will include another five to seven different arenas. Designers are toying with the idea of a tube stage, where competitors slug it out in a futuristic underground transport system, and a park area with trees and hills. Suburb, farm and ghetto arenas are also planned. Although these concepts sound strangely pedestrian, they will no doubt be exploited for any possible twisted humour content. Anyway, they're a change from space stations and the clichéd dark sci-fi city setting.

Importantly, the game's use of cool comic-book graphics and unusual settings gives it an individuality which is lacking in most PC software at the moment. Furthermore, the list of multi-player options should keep deathmatch fans happy. However, Rebellion has a lot of work to do. *Battle Zone* was a long time ago, and modern players expect a little more to a game than driving around shooting at things. Not *much* more, just a little. Plentiful power-ups, traps and secret areas will probably be enough to supplement the rather simplistic gameplay. But no doubt Rebellion has already thought of all that...



**For visual diversity, the game includes rural as well as urban settings. Rural arenas will feature hills and suitably weird foliage (above)**

# Psychic Force

**Taito brought a much-needed extra dimension to the beat 'em up with this singular arcade title.** A decent PlayStation conversion could only consolidate the rise of the 360-degree beat 'em up





**The nocturnal urban backgrounds are very reminiscent of those in AM3's *Last Bronx*, but *Psychic Force* features traditional arenas too**

When Taito revealed the arcade version of 3D beat 'em up *Psychic Force* at JAMMA last February, it turned a few heads, despite the unveiling of *VF3* at the same event. That could have been because at the time Taito was in serious decline and the crowds were merely vultures circling above the potential corpse of a once great company. Alternatively, it was because *Psychic Force* was a distinctly promising beat 'em up, offering something new to the genre: fighters suspended in the air!

## Importantly, the 360-degree arena appears to be more than just a gimmick. Plenty of moves exploit it

It isn't an entirely new idea. Sega's *Dragon Ball Z* experimented with a similar concept, but *Psychic Force* is a thorough update with some great, atmospheric urban backgrounds and eight new, varied characters. Interestingly, *Psychic Force* combines its urban themes with traditional oriental and RPG motifs – Samurai-like characters fight winged warriors and modern wrestlers, and backgrounds include misty hills and pagodas as well as buildings.

Importantly, the 360-degree aspect appears to be more than just a gimmick: there are moves which exploit the free-playing area. For example, players can defend against 100% damage blows with the barrier guard feature, executed with a full circle rotation on the joypad, so the player performs a full backflip.

As tradition dictates, PlayStation *Psychic Force* comes with extra options including Vs, Training and Street modes. Apparently, it also includes some features taken from the recently released arcade update, *Psychic Force EX*. Full details, though, have not been released.

It won't be new features which the conversion gets judged on, though, but the game itself. If the console title replicates the original well, this should be a worthy PlayStation beat 'em up. At least the new 'floating fighters' approach will provide gamers with a fresh repertoire of moves to learn. A little variation is something that this achingly tired genre is desperately calling out for.





**The game features eight graphically diverse fighters**



**The 'floating fighters' approach employed in *Psychic Force* calls for players to learn a full range of up/down, as well as right/left, moves**

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|---|---|
| **Format:** | PlayStation |
| **Publisher:** | Taito |
| **Developer:** | In-house |
| **Release:** | October |
| **Origin:** | Japan |

# Queen - The Eye



**Affiliated EA developer, Destination Design, leaps into potentially hazardous gaming waters**

**with a project based around rock Gods Queen. Fortunately though, it looks like benefiting from a unique artistic vision**



**Using some exquisite prerendered backdrops and realtime polygon characters, *Queen* looks quite beautiful**

Some readers will no doubt be sceptical about **Edge**'s argument in this month's issue that the worlds of videogaming and music are coming together. This title, a Queen-inspired PC arcade adventure, could quite easily be presented as 'exhibit A'.

*Queen - The Eye* is set in an apocalyptic future where, according to EA's press release, 'the economies of the world have collapsed into a brutal global recession'. A bit like the present, then. In this weird dystopia, all remaining survivors are ruled by a self-replicating bio-technology called the Eye which is, and this may sound unnervingly familiar, seeking to eradicate all creative individual thought from the human race. It is the player's role - as the game's hero, Dubroc - to journey through five domains and eventually destroy the Eye so that mankind can, once again, be free. As with most arcade adventures, the game is apparently full of cryptic puzzles, traps and secrets, and also includes over thirty motion-captured, polygon characters.

Surprisingly, *Queen - The* Eye looks gorgeous (the music/videogame crossover isn't usually the most promising of genres), with some astoundingly detailed and atmospheric pre-rendered backgrounds. The characters are also remarkably well drawn, featuring real-time, facial animation to give them a healthy believability. Not so surprisingly, the influence of Queen is visible throughout. For example, each of the five zones - The Arena, The Works, The Theatre, The Innuendo and The Final Domain - is modelled around imagery and artwork associated with the band - so excerpts from album artwork often pop up in the background, giving the title a close affinity with its inspiration. The five CD ROM set also features an hour and a half of Queen's best known tracks.

As great as this game looks, it's debatable just how many prog-rockers are buying videogames. Consequently, *Queen the Eye*, which is full of references to the band, will probably need to prove itself almost indispensable in order to attract non-Queen fans. Judging by the fact that dance, and occasionally, indie acts are becoming more prevalent on game soundtracks, there may be quite a stigma attached to buying a title which features music by your mum's favourite group. On the other hand, the PC does tend to attract more mature gamers and, no doubt, some of these will be cloth-eared dinosaurs who will revel in its glam rock pretensions – for them, this homage to the ultimate MOR rock band may be just the ticket. Mercifully though, the artists at Destination Design have stopped short of including a motion-captured Brian May. Not recommended, that.



| | |
|---|---|
| **Format:** | PC |
| **Publisher:** | EA |
| **Developer:** | Destination Design |
| **Release:** | Late 96 |
| **Origin:** | UK |



# Daytona USA Championship Circuit Edition

**Recognising that its ageing *Daytona USA* conversion, fell well short of expectations,**

**Sega appeases fans with a reprogrammed and redesigned conversion of its supreme racing game**







**The new 3D engine moves more like *Sega Rally* and has less scenery 'pop-up'**



***Daytona* is still one of AM2's finest moments. Hopefully, this new version will push the Saturn even further**

It is 18 months since the Saturn conversion of *Daytona USA* was released, and while few could pick faults with its playability and handling, it was found wanting (in technical terms, at least) compared to the next-generation standard-bearer that was PlayStation *Ridge Racer*. It's been a long time coming, but Sega has finally decided to settle an old score by producing *Daytona: Championship Circuit Edition*.

Sega is keen to stress that *Daytona CCE* is more than just a 'remix'. For a start, the graphics have been completely overhauled, with courses, vehicles and textures receiving comprehensive redesigns. Furthermore, these improvements have been made with no loss of frame rate. Sega assured **Edge** that *Daytona CCE* will run in fullscreen at 30fps on NTSC machines, and, with luck, the PAL conversion will be as good as that of *Sega Rally*.

On top of the visual improvements, gameplay extensions have been made. There are two new tracks – Desert City and National Park Speedway – and some new cars, but further details about these are currently unavailable. Players will also be able to use Sega's new analogue pad and the established racing controller.

Interestingly, several members of the Saturn *Sega Rally* team, including the game's producer, are working on the new *Daytona* project. Their influence on the content can perhaps most clearly be found in the inclusion of a ghost mode, identical to *Rally*'s, which allows players to race against their own previous best times. There's also a splitscreen mode, which will finally give fans the twoplayer option they've been waiting for.

**There's now a splitscreen mode which will give fans the twoplayer option they've been waiting for**

Imbuing *Daytona* with the attributes of *Sega Rally* and then improving on both games is bound to be a massively popular move with Saturn owners. Sega needs a title that is strong enough to attract new gamers to the Saturn and which will stand alongside *Virtua Cop 2* and *Fighting Vipers* in the continued battle against the PlayStation. ∎





**While *Daytona CCE*'s cars look similar to the original game's, the level of detail in the backgrounds has increased, as has the visible distance**



| | |
|---|---|
| **Format:** | Saturn |
| **Publisher:** | Sega |
| **Developer:** | In house |
| **Release:** | November |
| **Origin:** | Japan |

# Virtual-On

**AM3's robot battle game was a hit in the arcades, but can the Saturn's inferior hardware cope with such mech-obsessed visual flamboyance?**




***Virtual-On*'s frenzied arena-based action went down well in the arcades, but will the game impress console gamers? A lack of depth may deter *VF* fans**




**There are eight robots to choose from in the arcade version, each with its own weapons**






***Virtual-On* features a true 3D arena – is this the future of videogame combat?**

As the gap between high-end arcade technology and the 32bit consoles widens, it's clear that more and more compromises will have to be made in order to create conversions. AM2's *Virtua Fighter 3* will clearly be an impossibility on the Saturn; AM3's *Virtual-On*, a similarly high-end title, may only just make the mark.

The premise doesn't sound that technically challenging: *Virtual-On* is an arena based shoot 'em up where the player, controlling one of eight selectable robots, has to do battle against another robot with missiles, lasers and all manner of heavy weaponry. It's really a cross between *Virtua Fighter* (one-on-one combat) and *Cyber Sled* (arena-based warfare), but what really impressed arcade gamers were the beautifully designed robots – created by Gundam artist **Hajime Katorki**.

The problem with the conversion is that the arenas are so large, Sega's console cannot fall back on the bitmap scaling which made *Virtua Fighter 2* possible. Everything has to be done in true 3D – making the game considerably slower than the original (at least, judging by the early version **Edge** saw).

Another problem is graphical detail. The robots in the arcade version were intricate and visually stunning. In the early Saturn version, they've lost a lot of their crisp definition and now look rather ragged. Compromise, once again, seems to have reared its ugly head.

The big question is gameplay. Will running around shooting at another robot in various different arenas hold the home player's attention? In some ways, the game has more depth than beat 'em ups because it takes place in a true 3D arena and not on a 2D plane. However, it could be that, without the majestic graphics, the smooth animation and the arcade version's twin 29-inch monitors, *Virtual-On* will be incredibly limited.

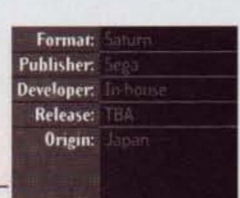
## Will running around shooting at another robot in various different arenas hold the player's attention?

It is early days yet, though. Twoplayer splitscreen and link-up modes will no doubt boost the game's playability, and a dual joystick controller for the Saturn was recently revealed at the Tokyo game show – so the original arcade control method will be available to the home player. Furthermore, if plentiful weapons and more tactical scope are added, the game could still work on the Saturn. Otherwise the chances are that it will be the videogames equivalent of watching Independence Day on a small black-and-white portable.






**Despite losing some definition in the conversion process, the robots are still stylish**



| | |
|---|---|
| Format: | Saturn |
| Publisher: | Sega |
| Developer: | In-house |
| Release: | TBA |
| Origin: | Japan |

# Namco Race Game (untitled)

The premier Japanese developer reaffirms its position at the apex of PlayStation development, with another title destined to keep arcade fans flocking to Sony's console. But is it another case of *Ridge Racer* remixed, or a whole new start?





Judging by the Tokyo Game Show version, Namco has made progress with its PlayStation 3D



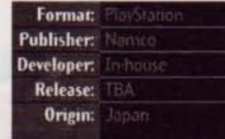


With Psygnosis, Konami and Capcom all producing quality PlayStation games recently, it looked as though Namco was losing some of its kudos as the premiere developer for Sony's machine. However, the recent Tokyo Game Show (see news) saw Namco introducing an as yet untitled racing game – intended as a big step beyond *Ridge Racer*.

Despite being only 20% complete the new racing title looks amazing with some beautifully designed locations and typically powerful looking vehicles. The backdrops give a real sense of 3D with well textured rockfaces jutting out beside the track and dozens of different buildings lining the road. There also seems to be more of an attempt to place the action in a real world context than there was in *Ridge Racer*. Tourist attractions like the Arc de Triomphe and the Acropolis crop up on certain circuits and there is a real

**Despite being only 20% complete the new title looks amazing with some beautifully designed locations**

| | |
|---|---|
| **Format:** | PlayStation |
| **Publisher:** | Namco |
| **Developer:** | In-house |
| **Release:** | TBA |
| **Origin:** | Japan |





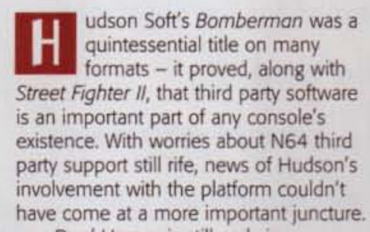




Featuring 12 different cars, Namco's new game includes controls similar to *Ridge Racer's*, but with more importance placed on gears



# Dual Heroes



## Old school Japanese developer Hudson Soft lands, the first blow in the 3D beat 'em up

**scuffle that looks set to ensue for Nintendo's fledgling 64bit box**

Hudson Soft's *Bomberman* was a quintessential title on many formats – it proved, along with *Street Fighter II*, that third party software is an important part of any console's existence. With worries about N64 third party support still rife, news of Hudson's involvement with the platform couldn't have come at a more important juncture.

*Dual Heroes* is still early in development, but already the title promises much. Graphically, things are a little sparse at the moment. In terms of fighters, only two have been revealed: Gai, who looks rather like a Power Ranger, and Zen, sporting blue, ice-like armour. But they do not disappoint – both are incredibly intricate, resembling pre-rendered CG characters rather than ingame combatants.

One of the most interesting elements of the game is its 'Virtual Gamer' concept. Basically the player will be able to choose from a selection of virtual opponents: computer-controlled gamers who have their own techniques and favourite fighters. In effect it will be rather like competing against a second player. With *Bomberman 64* also in development, Hudson are a Japanese company sure to forge a strong line-up for the Nintendo 64.





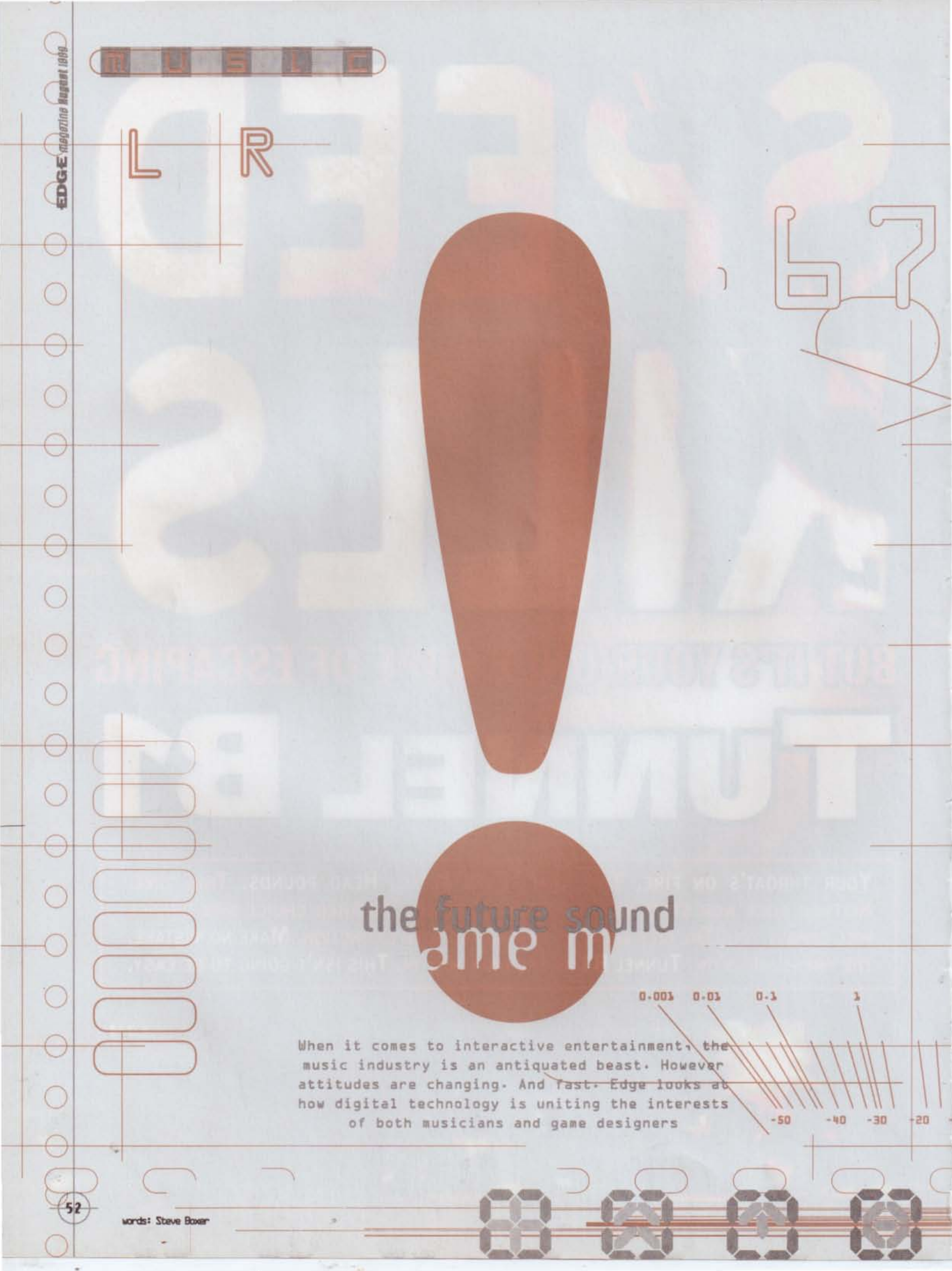
**Compare the realtime visuals (top) with the SGI renders (above)**

| | |
|---|---|
| **Format:** | Nintendo 64 |
| **Publisher:** | Hudson Soft |
| **Developer:** | In house |
| **Release:** | TBA |
| **Origin:** | Japan |





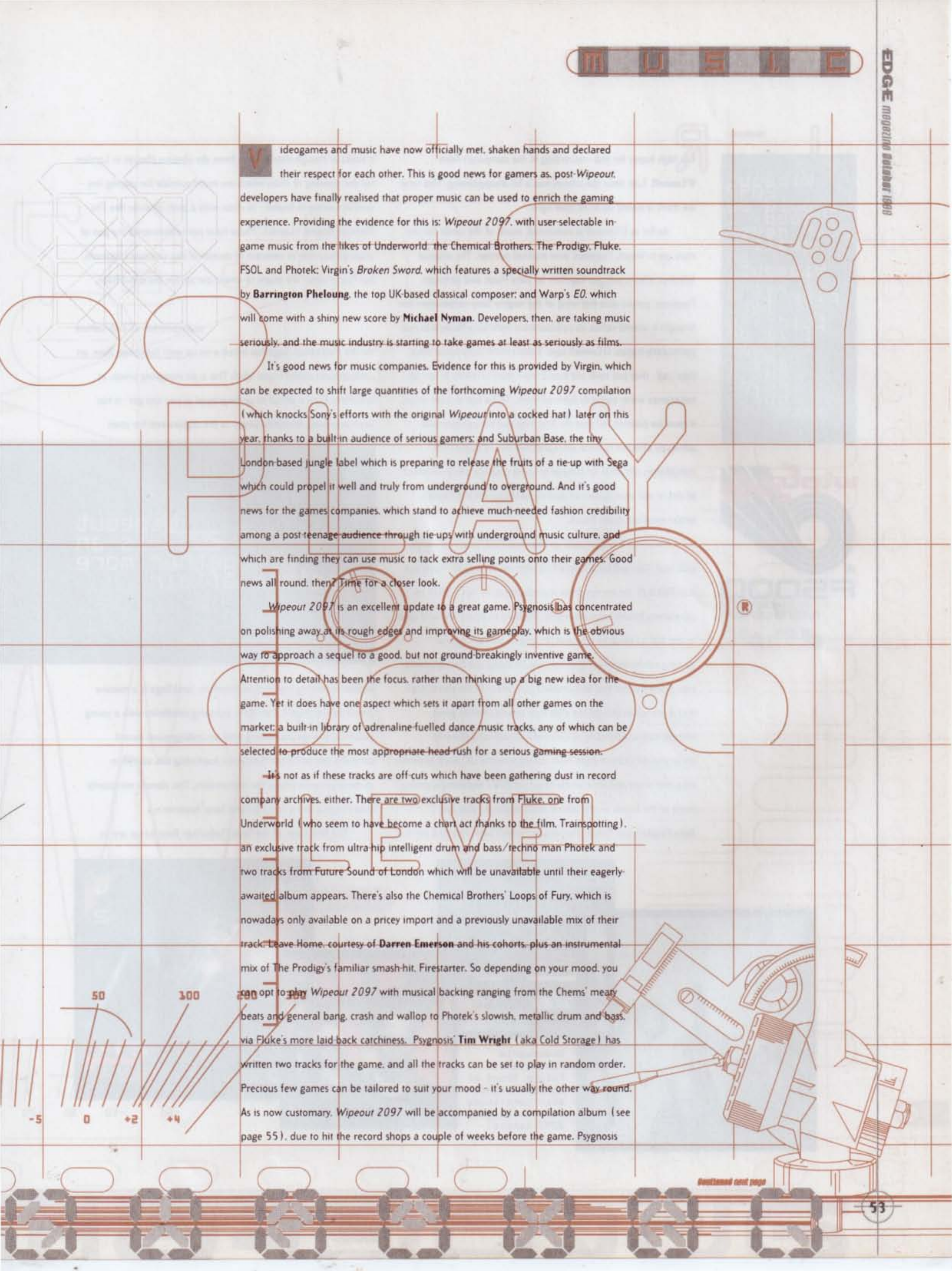
**The hi-res characters are outstanding in *Dual Heroes*. Quite how fast they'll be is another matter, of course**



# the future sound

When it comes to interactive entertainment, the music industry is an antiquated beast. However attitudes are changing. And fast. Edge looks at how digital technology is uniting the interests of both musicians and game designers

words: Steve Boxer






Videogames and music have now officially met, shaken hands and declared their respect for each other. This is good news for gamers as, post-*Wipeout*, developers have finally realised that proper music can be used to enrich the gaming experience. Providing the evidence for this is: *Wipeout 2097*, with user-selectable in-game music from the likes of Underworld, the Chemical Brothers, The Prodigy, Fluke, FSOL and Photek; Virgin's *Broken Sword*, which features a specially written soundtrack by **Barrington Pheloung**, the top UK-based classical composer; and Warp's *E0*, which will come with a shiny new score by **Michael Nyman**. Developers, then, are taking music seriously, and the music industry is starting to take games at least as seriously as films.

It's good news for music companies. Evidence for this is provided by Virgin, which can be expected to shift large quantities of the forthcoming *Wipeout 2097* compilation (which knocks Sony's efforts with the original *Wipeout* into a cocked hat) later on this year, thanks to a built-in audience of serious gamers; and Suburban Base, the tiny London-based jungle label which is preparing to release the fruits of a tie-up with Sega which could propel it well and truly from underground to overground. And it's good news for the games companies, which stand to achieve much-needed fashion credibility among a post-teenage audience through tie-ups with underground music culture, and which are finding they can use music to tack extra selling points onto their games. Good news all round, then? Time for a closer look.

*Wipeout 2097* is an excellent update to a great game. Psygnosis has concentrated on polishing away at its rough edges and improving its gameplay, which is the obvious way to approach a sequel to a good, but not ground-breakingly inventive game. Attention to detail has been the focus, rather than thinking up a big new idea for the game. Yet it does have one aspect which sets it apart from all other games on the market: a built-in library of adrenaline-fuelled dance music tracks, any of which can be selected to produce the most appropriate head-rush for a serious gaming session.

It's not as if these tracks are off-cuts which have been gathering dust in record company archives, either. There are two exclusive tracks from Fluke, one from Underworld (who seem to have become a chart act thanks to the film, Trainspotting), an exclusive track from ultra-hip intelligent drum and bass/techno man Photek and two tracks from Future Sound of London which will be unavailable until their eagerly-awaited album appears. There's also the Chemical Brothers' Loops of Fury, which is nowadays only available on a pricey import and a previously unavailable mix of their track, Leave Home, courtesy of **Darren Emerson** and his cohorts, plus an instrumental mix of The Prodigy's familiar smash-hit, Firestarter. So depending on your mood, you can opt to play *Wipeout 2097* with musical backing ranging from the Chems' meaty beats and general bang, crash and wallop to Photek's slowish, metallic drum and bass, via Fluke's more laid-back catchiness. Psygnosis' **Tim Wright** (aka Cold Storage) has written two tracks for the game, and all the tracks can be set to play in random order. Precious few games can be tailored to suit your mood – it's usually the other way round. As is now customary, *Wipeout 2097* will be accompanied by a compilation album (see page 55), due to hit the record shops a couple of weeks before the game. Psygnosis

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"Wipeout 2097 should be good. I can never qualify in Wipeout. I still play it a lot, thinking I'll do it this time. But I never quite make it."
Darren Emerson, Underworld

wipEout 2097 F5000 ANTI-GRAVITY RACING LEAGUE

Red Bull has high hopes for this – according to the company's **Glen O'Connell**. 'Last time, the album was a bit disappointing. This time, we think it stands up in its own right.'

As far as O'Connell is concerned, much of the credit for this must go to Virgin, Psygnosis' new musical partner. The original *Wipeout* album was put together by Sony Music and although Psygnosis' period as a tiny wing of the mighty Sony corporation has brought it untold riches, its collaboration with Sony Music was not particularly happy. O'Connell says, 'I don't think Sony knew what they had – they just took old tracks from their archives. It was an experience we've certainly learned from.' To be fair to Sony music, it must be pointed out that the first *Wipeout* compilation was adversely affected by time pressures. But the *Wipeout 2097* compilation album is an altogether more credible affair. As proof of this, it will even spawn an associated single release: Fluke's rather excellent Atom Bomb.

Psygnosis will also back up *Wipeout 2097*'s launch with a club tour. This will be a joint effort with not only Virgin Music but also Red Bull, the energy drink manufacturer, in true 1990s co-promotion, brand association-style. Die-hard clubbers are well used to this sort of thing by now and, as long as they get a good evening's entertainment, they can handle being marketing guinea-pigs (look out for Red Bull product placement in the game, too). And it sounds as though the club tour *should* provide good entertainment. According to O'Connell, 'It will take place in underground clubs in eight cities throughout the UK. We'll probably take one room and do a whole *Wipeout 2097* experience, getting some of the bands on the album to DJ and even play live.'

**John Fugler** from Fluke: 'The venues haven't been finalised yet, but it looks as though they'll range from the obvious choices in London for the opening to clubs which are more suitable for playing live – such as Lakota in Bristol – to clubs with a potty attitude like The Pleasure Rooms (Leeds).' Fluke have just rediscovered the joys of playing live – they're veterans of several of this summer's festivals, but Fugler says: 'We might re-invent our set for the dancefloor.'

appropriation of club culture for the Playstation. Sega has inked a tie-up with Suburban Base, an underground dance music label. This is an intriguing union, as Suburban Base is about as underground as you can get – it has been purveying energetic jungle to the cognoscenti for years

the first Wipeout album was adversely affected by time pressures. Wipeout 2097 is an altogether more credible affair – it will even spawn an associated single release

without attracting much overt attention – and Sega is a massive global brand. Sega is, therefore, pursuing credibility with a young audience through association with an underground record company, just as Sony's Playstation marketing has started to concentrate on cracking the mainstream. This doesn't necessarily mean Sega is still a jump behind Sony, however.

The first fruits of the Sega/Suburban Base tie-up are so





Underworld (left) and Future Sound of London (right) both contribute well to *Wipeout 2097* (above)

## Wipeout 2097: the album



Released in late September is *Wipeout 2097*: the album. Virgin Records' piggybacking compilation of tracks from the game. **Edge** tunes in for track-by-track rundown...

FSOL: We Have Explosive
Old skool-influenced, rather funky effort with more than a hint of the Chemical Brothers about it and Kraftwerk-style vocoder vocals. A very good track indeed, if not quite fast enough to provide good backing while thundering along Talon's Reach. Bodes very well for FSOL's eagerly-awaited, soon-to-arrive album which you'll also be able to find it on.



Fluke: Atom Bomb
Could do well when it's released as a single. Driving military drum patterns, hilarious loony lyrics and typical grumbling Fluke noises. Leads straight on from where OTO left off. Catchy, bouncy and rather meaty.

The Chemical Brothers: Loops of Fury
Typical Chems fare: big, raucous and brilliant. But it's been available for ages on the (admittedly rather elusive and expensive) Loops of Fury EP. And it's not even the best track from that EP.

Underworld: Tin There
A fast, uncomplicated trancer with a hint of Rez and some typical gorgeous Underworld detail work. Seems a bit anonymous at first, but will grow after repeated listening. Apparently, Pete Tong is already caning it but don't let that convince you that it's anything other than a classic slab of Underworld. Not as rich and textured as their usual stuff, but pretty good nevertheless.

Photek: The Third Sequence
Photek, aka Rupert Parkes, is fast becoming the next Goldie/Alex Reece, despite his uncommercial approach. This one marries Blade Runner effects and keyboard stabs to some seriously warped percussion. Brilliant.



The Chemical Brothers: Leave Home
Here, Underworld have taken the original, stripped it down to its bare essentials and added a sequenced bass keyboard line that sounds like Donna Summer's I Feel Love on speed. The result is both raucous and trancey and, like Tin There, improves with repeated listening. And you're also less likely to already own than Loops of Fury.

FSOL: We Have Explosive (Herd Killing)
**Edge** would definitely like some of what FSOL have been taking during their recent lay-off. This insane reworking of the opening track sounds like a 70s cop show theme crashing into a stack of drum machines. Annoyingly stop-start at times, but it sounds like The Chemical Brothers minus the record company pressure to make their stuff sound commercial. Mad.

Prodigy: Firestarter
Take one smash hit song which everybody's heard, remove the (rather annoying) vocal track and hey presto, you can shout about getting a Prodigy track on your compilation. A cynical marketing exercise redeemed by just one thing: it's the best of the in-game soundtracks. Should have stayed on the game and been replaced with a fresh track on the album release, though.

Fluke: V Six
Fluke in upbeat mode: a rather trancey effort with typically slinky beats and decidedly Goa-esque keyboards and effects. Not much by way of a tune, but burbles along rather nicely.

Daft Punk: Musique
A dubby, EQ-ed slice of deepish house from **Edge**'s favourite Frenchmen, which threatens to turn into techno thanks to some loopy percussive twiddles and a few squelchy analogue effects, but ends up sounding like the Human League. Daft indeed, but endearing. Been seen before – on the Source Lab 2 compilation, for example.

Source Direct: Wipeout 2097
Dark, fidgety drum and bass. Eschews strings in favour of techno-style effects. Would make a good accompaniment to a moody film scene in need of atmosphere. Not one of Source Direct's finer moments, though.

Photek: Titan
Trademark Photek stuff: big crashy beats which sound rather like dustbin lids and metallic effects combine to create a dark sound which could only have been created by Mr Parkes. To **Edge**'s ears, though, it sounds like it was influenced by games of yore and modern beat 'em ups.

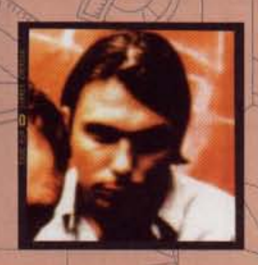
Orbital: Petrol
A hangover from the original *Wipeout*, this made-for-the-game track has since revealed its true colours as possibly the weakest slice of their melodic tour de force album InSides (E34). What's it doing on *Wipeout 2097*, eh, Virgin?

Leftfield: Afro-ride
Radically re-cut, techno-tinged version of Afro-Left from Leftism which should be release as a single, just so Smash Hits could print the mumbo-jumbo lyrics. Another *Wipeout* relic. Did Sony manage to sell any copies of the first compilation?

Artists on the album...
**Edge** spoke to both **John Fugler** (Fluke) and Underworld's **Darren Emerson** (below right) for their perspective on the tracks they produced for the game...

John Fugler on Atom Bomb and V Six: 'We've pottered around over the summer and strung some bits and pieces together which came out around this release. We thought we'd whack it out as a single, anyway. It came out of the whole live thing – in the last couple of years we've been writing stuff in a more live way. The track started off based on crap 70s spies and stuff like that. Bullet, Tosh and so on were based on the idea of a ferocious megalomaniac female character who wanted to take over the world. The tracks on the album are classic Fluke. We tend to write at two tempos – Bullet was written at 125bpm and we halved it to 62.5 at the end of the album, added more words and it mutated into a new track. This one is written at 100 and 130bpm. After we release this record, we'll have a holiday and think about writing new stuff. We have no problem with Virgin doing whatever we want. We can go and work under other aliases and so on."

Darren Emerson on Tin There: 'It's very simple: it's made for the game, not made for a club. It's something that was lying about as a few ideas and we finished it off for the game. The first thing was that it had to be speedy. When you're driving really fast you need some music that's fast. And we kept it quite minimal. Because we recorded it specifically for the game, we'll have to cut it for the album – change some EQs and so on. We've been doing a lot of touring, but it's coming to an end now so we're gonna hit the studio and write a new album. I'll pick up on my DJing and mess around playing loads of games. I wouldn't mind doing more stuff for games.'



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"I've got a PlayStation and a PC for games - I've been a games freak since I was young, with the ZX Spectrum and stuff. I used to go to games shows when I was younger and had an Amiga. We used to like stuff by that company Cinemaware. What happened to them? I go up on the Underworld newsgroup quite a lot - we're thinking of starting a new Underworld mailer. I've got a Power Mac in the studio, but I'm about to get a new 8500 because I need the PCI slots."

Darren Emerson, Underworld

Revellers at the Nottinghill Carnival were surprised to see a Sega float pumping out hardstep jungle

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low key as to be positively imperceptible: a white label 12-inch, circulated to DJs, branded withgraphics from its *Baku Baku* Saturn game. The approach taken for this is similar to that taken by JVC with *Tekken*: Suburban Base has overseen an exercise involving getting artists to take noises from the soundtrack to *Baku Baku Animal* and remodel them into dance tracks. The EP has techno and drum and bass mixes performed by Suburban Base artists The Dream Team and Timebase.

Revellers at the Notting Hill Carnival (including **Edge**) were surprised to find a Sega float, pumping out hardstep jungle - again, this was the work of Suburban Base. But the highest-profile result of this unlikely union will be a compilation album called Club Saturn, due for release this Christmas. This promises to resemble the *Wipeout 2097* compilation in reverse. Sega's in-house musician, Richard Jacques, explains: 'Club Saturn will feature all the top Saturn games between now and Christmas. Like the *Baku Baku* EP, we'll take sound effects from the games and get people to rewrite them into tracks.' Suburban Base's **Danny Donnelly** elaborates: 'The Club Saturn tracks will span a number of different styles. There'll be jungle tracks from DJ Hype, Pascal, The Dream Team, Remarc and Swift, house tracks from Dudarella, who have just signed to MCA, Marshall Jefferson and Acorn Arts, and trip hop tracks from D'Cruze and the Balouga Boys, who are signed to Stress.' Whether this eclectic mix will hang together as a whole is anyone's guess, but its very strangeness, plus the presence of the notoriously elusive and perverse house legend Marshall Jefferson should guarantee attention, if only to allow an assessment of whether he has lost his touch or not.

Suburban Base's Donnelly says: 'There'll probably be a playable demo of some Saturn games in with the album - we want to link the music and the game aspects. Games are a big thing with the jungle scene and the whole dance scene - people are always coming back from raves and putting games on. And it's a good promotion for us to be linked with a household name like Sega. Club Saturn will come out through our Breakdown Records compilation arm, which has already put out a collaboration album with MaxPower magazine.' (Boy racers love jungle...)

had more interest in music than most games companies, as illustrated by the PWEI soundtrack to the oddly addictive *Loaded*. And now, it has done a Psygnosis, and announced a tie-up with both underground techno label Warp and the Designers Republic for its forthcoming game *Hardwar*. It transpires that this owes more to geography than anything else, as Gremlin's **Mark Mattocks** explains: 'The angle is collaboration between Sheffield companies which are at the top of their industries. We've wanted to work with Warp for a long time, so we looked at two or three projects and picked *Hardwar*. We're trying to keep the music integrated with the game. We went to Designers Republic not because it's the thing to do but because



Sega's Nottinghill Carnival Suburban Base float (above). Gremlin's *Hardwar* (right) features Warp's music



Tetsuya Mizuguchi's love of clubbing is soon to permeate into Sega's new *Touring Car* coin-op

we've wanted to work with them for years.' *Hardwar* sounds intriguing – it's a futuristic arcade flight sim, a shoot 'em up and a strategy game – and Mattocks mentions Warp artists such as Autechre, LFO and Black Dog in connection with the game. As these are all no-compromise techno merchants, it could produce a very odd gaming experience indeed. All will come clear at Christmas, when *Hard War* ships on PC CD-ROM.

Gremlin's interest in acquiring music for use in games has not all been plain sailing. Although there's no suggestion that its dealings with the small indie Warp are anything but harmonious, it has fallen foul of the arcane practices and attitudes of the mainstream record industry. Mattocks utters these dark words: 'There are a few attitudes in the music industry that need to change. It mustn't see what we're doing as a revenue stream, but as a new outlet. Otherwise this industry will turn round and say that we don't need published music.'

SCI had a similarly aggravating experience recently, when it tried to license some tracks from Goa trancers Hallucinogen for its forthcoming redesign of *SWIV* for the PC. The company's **Sam Forest** explains: 'We weren't able to get a licence for the tracks in time for the game's release. There was a hassle with getting the royalties cleared. It's a bloody nightmare, really.' This reflects well, strangely enough, on Virgin Records' efforts with the *Wipeout 2097* album. Record companies like Virgin could profit immensely from adopting a sensibly open-minded attitude towards computer games, and they will have to if they are to avoid long-term damage if Internet-based sample banks, such as Zion Train's Sound Pool (detailed on page 57) take off.

drum machines and synths have irrevocably changed the nature of music. Not just as a result of the peculiar sounds they can be used to make, but

## Zion Train: pooling sounds

Dub collective Zion Train are not, on the face of it, the sort of group you'd expect to be technology wizards. They are notable for adopting a political stance, disseminating agit-prop concerning the destruction of the planet, the marketing-led excesses of the 1990s and any curbing of the right to free speech. They are sworn enemies of the major labels of the record industry. Yet when it comes to technology, they're bang up to date. Last year's Homegrown Fantasy puts all the music CD-ROMs created with vast heaps of major label cash to shame. Their Web site, the Wobbly Web, has become the main forum for dissemination of their ideas. And with the Soundpool, their latest technological project, they believe they have hit on an idea which could seriously harm the bloated infrastructure of the record industry and usher in a new era of creative collaboration between musical artists.

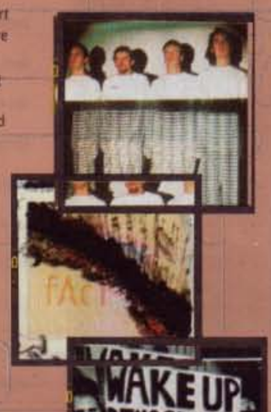
The concept behind the Soundpool is dead simple. Zion Train and anyone else signing up to it are free to use any of the 'Ideas, samples, conversations and collaborations' contained in the Soundpool. Without recourse to lawyers, publishers or other "musical businessmen". It's a means of collaborating with all ZT's musical peers which, because it makes heavy use of the Internet, doesn't require physical proximity.

The issue of copyright when one artist samples another's work is perhaps the most vexed in the music industry. Colin from Zion Train (who likes to be known as Agent Cod), is full of examples of copyright madness: 'There's a guy called John Oswald who invented what he called Plunderphonics. He released an LP called Dab with a pic of Michael Jackson on the cover, in which each track was a restructuring of other people's material – Dab is, of course, Bad backwards. He pressed 1,000 up with his own money, but still was forced to take them all back after legal action. WEA then hired him to do a celebration of their 40th anniversary in the music business and the Grateful Dead hired him to take probably their most famous song, Dark Star. They gave him 57 different live recordings of the song, performed between 1967 and 1994, and he created a 2-hour piece using all of them – sometimes in 30-second bits, sometimes in 1-second bursts. It ended up as a continuous flow, travelling forward and backward in time. It's an amazing piece.'

Proof that samplers can be used artistically is even more abundant than stories about major labels suing the arses off people using unauthorised samples. Zion Train hope to circumvent this with the Soundpool idea. The band is not proposing that the Soundpool become a worldwide sample bank, as Agent Cod points out: 'The existing Soundpool was our Soundpool, for the Grow Together album – for our next LP we'll create another Soundpool. We'd like to see other people starting their own Soundpool. What we are saying to artists is when, say, you're pissing about on the guitar and you get something nice, send it to us and we'll play it inside-out and upside-down. Only people with few ideas desperately hang onto what they've got.'

The archaic legal structure of copyright and publishing stands in the way of art and music. But now there can be a complete worldwide digital community.' Fair enough, but how do Zion Train propose to overthrow the majors with their technological savvy? They think that things like the Soundpool will bring an artistic freedom which would discourage artists from signing to majors: 'Publishers fifty years ago owned about 95 per cent of what they published: now they own about 15 per cent. People like Warner have been picking up thousands of little people in an attempt to make up the profit they had before. Nowadays, if you sign up to a large label you're tied into doing albums, videos, Web sites and promotions.'

But, say Zion Train, you can do these yourself without signing to a major, with a bit of DIY electronica. 'We produced the CD-ROM for £25,000, which let us put it in the shops at £10. We're setting up to do commerce on the Net, and we'll be in the same position as, say, Sony. Except that if Sony set up shop on the Net with a 100,000 back catalogue and we did the same with 20, we'd get more sales, because Sony's site would be so daunting. When set-top boxes appear, Internet radio stations will become viable and there'll be unlimited pirate radio. As a by-product of the promo budget for our LP, we've performed the groundwork to set up a permanent TV station on the Net.'




Zion Train (top) may be laid-back anti-establishment dubsters, but their passion for technology singles them out. Their *Homegrown Fantasy* CD-ROM (see E35) is well done, as is their Web page

"I've been so busy recently that I haven't been able to check new games out. What's that *Track and Field* for the Playstation like?"

Darren Emerson, Underworld



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> “Wipeout 2097 artists on gaming John Fugler of Fluke: "Certain games complement music well, particularly the ones with a lot of motion in. Since we started making music, we've found that the best way to test it is to hammer really fast down the motorway with it on full whack. If the adrenaline is there, the concentration is there. If the music doesn't work, your concentration falters.”
>
> John Fugler, Fluke

also because they allow people to make rich music very cheaply. People have been known, in the 1990s, to create tracks in their bedrooms and watch them rise up the charts. And as technology forges ahead, it becomes both cheaper and more capable. Only recently, however - particular since the likes of **Carl Craig** and **Derrick May** picked up Kraftwerk's gauntlet and invented techno in the dismal surroundings of Detroit, and various pioneering American artists turned disco into house - have artists started to get to grips with the artistic possibilities offered by sophisticated, electronic music-making kit.

These are still relatively early days in the world of electronic music, and pioneers using digital studios and new media are constantly discovering vast acres of new ground which is just begging to be broken. Whether, like Zion Train (see previous page), you choose to use electronica to break free from the shackles of the record industry or, like *Header* (see opposite), you accidentally stumble across a new way of marrying cutting-edge music to interactivity, you will find that electronic machinery can open doors into unexplored areas of the music world.

And considering the similarity between certain game genres and films, it has been surprising that classical composers, who nowadays are almost universally well practised in the art of scoring music for films, have rarely turned their hands to creating in-game music (apart from in Japan, of course, where RPG companies such as Enix and Square have employed world famous composers and orchestras for producing the music for CD albums of game music). But is is starting to happen and surely shows proves beyond doubt that at last, developers are taking in-game music seriously. In turn, some of the finest classical composers in the world are taking in-game music seriously. Barrington Pheloung is generally held to be the most talented British-based composer - although Australian, he is based in Essex. A back catalogue of 48 ballets and a reputation as one of the most talented conductors around have made him a darling of the classical scene, but he is best known for his knack of bringing music to the masses: his music for the

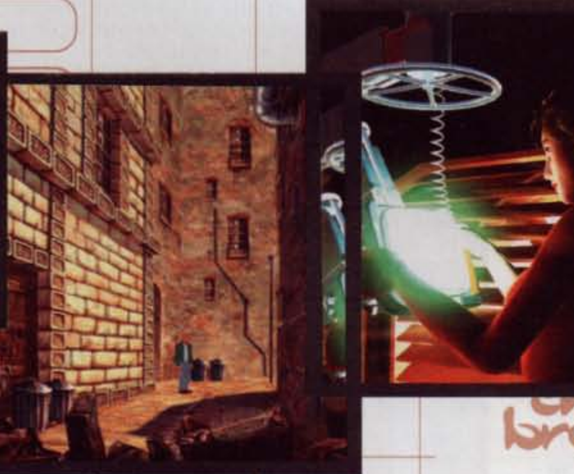
> I've written over three hours of music for *Broken Sword* which is unique in the genre
>
> Barrington Pheloung, composer

Inspector Morse TV series and the film Truly, Madly, Deeply has sold so many copies that it has entered the charts.

Pheloung has just completed the music for *Broken Sword*, Virgin's excellent animated point-and-click gameadventure. Pheloung is quite a character, too. Aged 37, he started off as a blues guitarist before forcing his way into London's prestigious Royal College of Music at the age of 18. This background means he's not afraid to experiment. The *Broken Sword* music, he claims, is unique and ground-breaking: 'Virgin would probably have been happy with a main theme and a few cues [scene and action-specific musical phrases] but I thought that rather than creating an orchestral score like for a movie, I could make one which interacted with the game. So I've written over three hours of music, which is unique in the genre and over 400 cues.'

These are designed to relate to other cues, but not necessarily in the same way each time. So if, say, you go down an alleyway for the second time, you might find the music is not





From left to right: Top classical composer Barrington Pheloung created over three hours of music for Virgin's *Broken Sword*, while Warp's *EO* employs a score by Michael 'The Piano' Nyman



related to what you heard the first time. I devised a new musical technique of cross-fading any X-cue with a D-cue, which gives about 40 hours of different musical permutations. It was a dream score for me. With a big feature film score, all the parameters are set to the frame and the second before you start. But with *Broken Sword*, I could write different music for the same occurrences so that if, say, a character goes down an alleyway, it could make you think very differently about what he's thinking.'

Pheloung is proud of that fact that he has broken new ground: 'To me, it's a brave new world, and I want to get in on the ground floor,' and is keen do more work along similar lines: 'I want to take it to the extreme. I could easily have written five or six hours of music, because it's such a beautiful game, but we were restricted to two CDs.' Pheloung scored the music for an orchestra and added the structural elements by breaking it up into sampled chunks. This, he says, was a mammoth task: 'It's like doing six feature films at once. The biggest feature film score I've done was a two-hour one for Nostradamus. That had two and a half A4 sheets of cues. Broken Sword took up more than 400 A4 cue sheets, which were pasted all round the walls of my studio.'

He's full of good words for the game: 'What's beautiful about it is that I can play it with my two little kids and the whole family around one monitor.' And his soundtrack has undoubtedly enhanced it, both in aesthetic terms and even in gameplay terms: 'The music is full of clues. Sometimes, these are total red herrings, but sometimes they're genuinely helpful.'

As if more proof were needed of the newly developed serious approach among games developers towards music, Japanese developer Warp has commissioned Michael Nyman to produce the soundtrack for its forthcoming Saturn spectacular *EO* (currently commanding huge amounts of attention in Japan). Warp head honcho **Kenji Eno** has this to say about the project: 'Nyman wrote the music for Peter Greenaway's The Cook, The Thief, His Wife and Her Lover,' but at the time he was not so famous in Japan. First, I wanted to use Ryuichi Sakamoto, who is very famous, but I couldn't find what I was looking for in his music. Only Nyman's would fit my game. We asked him to perform with a bigger orchestra (he usually performs with smaller groups), and this will perform 14 pieces for *EO*, some of which are just for piano and some of which are full orchestral ones. *EO* has CG and polygon parts and Nyman's music can be listened to in the CG parts, the intro and the ending. We will also release a music CD from the game.'

## Interactive music: Header

CD-ROM remains virtually unexplored as an artistic medium. Why this should be is one of the great modern mysteries - undoubtedly, commercial pressures don't help, but it's now cheaper than ever to author CD-ROMs. Fair enough, conventional art (unless it is digitally created, as with the works of William Latham) tends to lose its point in the digitisation process. But modern music is to a large extent completely digital. So why are music CD-ROMs, to put no finer point on it, so crap?

One problem has been that musical artists interested in creating CD-ROMs have generally been signed to major labels, which, in the absence of interesting ideas for musical use of the medium, have indiscriminately thrown vast amounts of money at the problem. Header's approach is the complete diametric opposite of that approach.

Header are a bunch of guys based in London's ultra-hip Soho whose previous lives either involved the music business or working for multimedia companies such as Dorling Kindersley. Fed up with producing anodyne, conventional CD-ROMs for DK, they set off on a journey of discovery aimed at finding out just how the CD-ROM medium could expand the boundaries of music. The result is *Header 1* - hopefully just the first of a long line.

The idea behind Header was to persuade artists to record tracks specifically for digital manipulation on a CD-ROM, and then add to each track a different interface, allowing the user (with Header, one ceases to be a mere listener) to alter those tracks in real-time. Effectively, every time you sit in front of *Header* running on your PC or Mac, you are performing a unique remix of that track.

*Header 1* also plays in audio CD players, as a six-track mini-compilation, sporting tracks from MoWax group UNKLE, drum and bass pioneers 4-Hero, techno God Carl Craig, the late, lamented dub guru King Tubby, deep house king Derrick Carter (hiding behind the alias Red Nail Kidz), and cerebral technoey dance group As One. As a compilation, it's rather unsatisfying - some of the tracks are very short, although quality is abundant. The UNKLE, 4-Hero and King Tubby tracks would pleasantl adorn similarly compilations (although not the same one, as they range from dreamy techno to furious dub, via drum and bass). The Red Nail Kidz track is dauntingly long, but nevertheless touched by Carter's genius. And the Carl Craig track is to say the least, challenging: Header is fond of relating how a certain Radio 1 DJ called them up to tell them the CD-ROM wasn't working, with Craig's track playing perfectly in the background.

But put *Header 1* in your CD-ROM drive and it quickly becomes apparent that you're witnessing some sort of birth. The intro screen consists of a whirling array of blue spheres with labels attached. Click on the one marked, say, Carl Craig, and you find yourself at a strange screen with a revolving portrait of Craig in one corner and five large dots floating around the middle. These represent different layers of the music: the track has been split into four loops, all carefully synchronised. So by wiggling them around with the mouse you can, for example, drop the bass out or chop the whole thing down to just the effects. The process of finding out what you can do to the music using this interface is hypnotic, and suddenly even this atonal track can be coerced into making some form of sense. The elements of the music are laid out for you, and it's up to you to shape it your satisfaction. The tools and raw materials for making your own music have at last left esoteric studios and arrived on your desktop. 4-Hero's track is particularly impressive in this regard: it's a drum and bass blueprint which can be assembled into different configurations with different flavours.

Considering the meagre resources at Header's disposal, *Header 1* is amazingly polished (although Header had trouble making it compatible with both PCs and Macs). The idea could quite obviously be taken much further, with the introduction of things like floating vocal, effects and ambience loops which could be pulled into any of the tracks. No doubt such ideas will find their way into future Headers. And goodness knows what kinds of music will transpire when some of the more cerebral electronic musical artists get their heads around the idea of writing specifically for CD-ROM. But at last, someone has found a way of marrying CD-ROM and music in a way which enriches them both.








Music CD-ROMs have had a tough time of late, but one of the best examples is *Header 1* - a brave and fun way to explore electronic music in an accessible, interactive form on CD-ROM

"One of the scariest things about games is when you find yourself dreaming about them"

Jon Fugler, Fluke





A special thanks to the Designers Republic for the use of their fonts and logos

# Fighting Vipers

A brand-new beat 'em up from AM2 should be enough to raise anyone's expectations, but does *Fighting Vipers'* novelty value survive the transition from the arcade to the Saturn?




**Action from *Fighting Vipers*: part of the multi-angle in-game replay of armour-busting (left)**

The constantly evolving nature of the beat 'em up makes it a demanding genre for developers. Fighting games are, it seems, like sharks – they've got to keep moving forward or they'll die. 'Innovate or be damned' should be the motto of every beat 'em up developer, and you can almost picture it inscribed on the top of every workstation at Sega's prodigious AM2 R&D department. Its *Virtua Fighter* series completely revolutionised the genre and *Fighting Vipers* – a departure from the *VF* lineage – went down a storm in the arcades in Japan when it was released last year.

What strikes you immediately when you play *Fighting Vipers* is its speed. The pace at which a typical bout moves is phenomenal, and at first all you can do is frenetically stab the punch button in an effort to keep your opponent at bay. And, as with so many beat 'em ups, it's easy enough to romp through the oneplayer game by just using the basic punches and kicks, along with the occasional block or two. In no time at all, you can see every level, defeat all the characters, dispatch the final boss and peruse the soothingly relaxed end credits. But, of course, you'd only see a fraction of the whole game – that's just the awkward introductions over with. The real meat of any beat 'em up is its twoplayer combat.

The popularity of *Fighting Vipers* in Japan derived

fighting vipers popularity in japan derived from the subtle twists on conventional beat em up gameplay and the wealth of special moves available

from its introduction of subtle twists on conventional beat 'em up gameplay, and the wealth of special moves available for each character (and naturally, the fact that it comes from the same stable as the *Virtua Fighter* series didn't do any harm either).

In an attempt to break away from the standard beat 'em up energy bar, the characters in *Fighting Vipers* sport body armour, which is monitored by a small body-shaped icon next to the player's energy meter. If a part of the armour takes enough hits in any one bout, it flies off, leaving the player much more vulnerable – any hits that connect with the unarmoured area are far more damaging.

Armour can only be damaged by certain 'crashing' moves, which take a second or two to charge up. When unleashed, they always floor the opponent and, if sufficient hits have been clocked up, destroy the other fighter's armour – not just destroy but spectacularly annihilate. The opponent is sent flying




**The hidden bear character, Kumachan, has no animation whatsoever and is... a bit odd, actually**

| | |
|---|---|
| Format: | Saturn |
| Publisher: | Sega |
| Developer: | AM2 |
| Price: | ¥ ?? |
| Release: | Out now (Japan) |







Corporate sponsorship a-go-go with Pepsiman (top right). Jane throws Tokio to the floor (right)






Heavy-metaller Raxel uses his guitar to poleaxe opponents. Before (top)... and after (above)

across the arena as the armour flies off their body, and then – in best John Woo action-flick style – the game replays the move instantly from three different angles, one after the other. The 'crashing' moves can also be used to power through certain counterattacks that can be launched by players – moves which guard against high and mid attacks and then sneak in a punch or kick.

The other unique selling point of *Fighting Vipers* is its arenas – they're walled. Solid brick and concrete barriers, glass panels or wire fences surround each arena, and they form an integral part of the fighting. Force an opponent back against a wall and instead of falling to the ground after a sustained barrage of hits, they stay on their feet, allowing you to let rip with another barrage of punches or kicks.

Each character also has a number of throws which make use of this feature. These consist of either launching an opponent towards the walls, or grabbing him and slamming him physically against them. And there's one last, immensely satisfying, aspect: finish off an opponent with a 'crashing' move and they go straight through the wall, shattering it into little pieces.

solid brick and concrete constructions glass panels or wire fences surround each arena and they form an integral part of the fighting

More typical carrots to reward longterm players include hidden characters – giant teddy bear Kumachan and T2-alike walking advert Pepsiman – whch means there's a huge variety of moves to discover.

So much for the novelties: what of the basic gameplay? Anyone who tries and fails to execute special moves will, perhaps a little too harshly, be punished by simpler punches and kicks, but aside from that criticism, the game performs well. The three-button control system replicates the *Virtua Fighter* block/punch/kick arrangement, and the game as a whole has a similar feel, which was undoubtedly a factor in its Japanese success. The characters move fluidly, the special moves are inventive without relying on the 'outrageousness' that some pretender beat 'em ups resort to, and its longterm learning curve is solid.

*Fighting Vipers* only really suffers in comparison with those twin beat 'em up pinnacles, *Tekken 2* and *Virtua Fighter 2*, and that's a hardly a serious problem. Yes, the low-res graphics are something of a disappointment (despite running at 60fps), and yes, it doesn't have quite the finesse or, let's be honest, the clout of the *Tekkens* or *VF*s of this world, but it's a more than playable game and another quality notch in AM2's heavily marked bedpost.

**Edge rating:**

**Eight out of ten**






End a fight with one of the 'crashing' moves and your foe goes flying out of the arena



One of the unique features of the game is the way the characters use the walls to damage other players

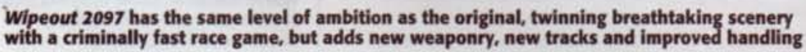
# *Wipeout 2097*

With a fully fledged *Wipeout 2* on the drawing board in Liverpool, *Wipeout 2097* is more of a 'special edition' than a completely new game. A year on, how does the game stack up against more recent arrivals on the PlayStation and just how 'special' is it compared to its trailblazing predecessor?







***Wipeout 2097*** **has the same level of ambition as the original, twinning breathtaking scenery with a criminally fast race game, but adds new weaponry, new tracks and improved handling**

It's hard to believe that *Destruction Derby* outsold *Wipeout* to become the best-selling PlayStation game in Europe. A straightforward, if accomplished, driving game versus a breathtakingly fast futuristic racer, a truly visionary synergy of outlandish courses, with Designers' Republic branding and great British music. But, predictably, the conventional outsold the unconventional, the mainstream beat the avant-garde, even though *Wipeout* secured the PlayStation more 'cred' through the fashion and music press than any games console had previously achieved. A year on, *Wipeout 2097* is not so much a sequel as a substantial revamp of the Psygnosis launch game, with slight tweaks to the gameplay and, primarily, a new selection of tracks.

*Wipeout 2097* retains all the elements that made the first game such a landmark title. The control experience – with the racecraft delicately hovering above the surface of the track, bobbing over bumps and powersliding through corners – has, if anything, been improved. In the original, any contact with the barriers at the side of the tracks would result in your





**Checkpoints are strategically placed around each level, making you maintain a certain pace (above left). Kinder handling lets you scrape the edges of barriers (above) and the new blue vapour trail is a nice visual treat (right)**




| | |
|---|---|
| Format: | PlayStation |
| Publisher: | Psygnosis |
| Developer: | In-house |
| Price: | £45 |
| Release: | October 18 |




Toughest of the tracks is the Rapier-class Odessa Keys, which has jumps, tight corners and misspelled references to movies

ship being flipped over, disorientating the player and promoting a fairly conservative racing line. In *Wipeout 2097*, you can now scrape along the barriers, which throws up a satisfying cloud of sparks and gives the game a more exciting, roughhouse style of racing.

in wipeout 2097 you can now scrape along the barriers which throws up a satisfying cloud of sparks and makes for a more exciting roughhouse style of racing

Serious impacts with the barriers will still bring you to a halt but, thankfully, that confusing flipping has now been reserved for severe crashes and weapon hits.

There are other simple, seemingly minor, changes to *Wipeout 2097* that enhance the gameplay no end. The on-track power-ups - the speed-up chevrons and one-shot weapons - have been overhauled and a new energy meter keeps track of how much damage you've taken. New weapons include an automatic pilot and a new type of shockwave.

The autopilot is almost as much trouble as it's worth, guiding you along at top speed for around three seconds but then disengaging and making it hard to regain control - more often than not you'll end up tangling with the barriers. The new shockwave, however, is awesome. Hit the fire button and you'll trigger a mini-earthquake which ripples down the track before you, knocking other racecraft temporarily out of the running.

Also new for *Wipeout 2097* are the pit lanes. Running parallel to the start/finish grid, these red and black stripes top up your energy meter as you fly over them. They're not really much use on the first two, Vector-class, circuits, as races only last two laps and it takes a special kind of incompetence to destroy your racecraft in that short a space of time. On the later, longer and more difficult circuits, it's much harder to survive the three-lap race distance without paying at least one visit to the pits. It's a small addition to the basic gameplay but it punishes careless drivers and introduces an element of strategy.

Probably the biggest drawback in the first *Wipeout* was its pacing and game structure. While the tracks themselves hardly lacked ambition - many were simply stunning and some more stylishly textured than those in *2097* - their rollercoaster-like designs, packed with tunnels, canyons, huge drop-offs and mammoth leaps over gaping chasms, all took their toll in gameplay terms. Because of this, the original game was tortuously difficult and extremely uncompromising. Winning was essentially a case of spending a great deal of time learning both the layout of the circuits and the correct racing line for each one. There wasn't so much a difficulty grading as a difficulty leap, from the relatively easy opening pair of






Phenitia Park, a German city circuit, will be the first serious test of your braking and cornering ability






The second Vector-class track is the snowbound Sagarmatha, set in a Tibetan mountain range. The ice textures disappoint in places, but there's an excellent snowfall effect as flakes streak across the screen




You can select any of the music tracks or go for a random sampling

Continued next page

*Continued*





The all-new pits in *Wipeout 2097* run parallel to the home straights (top), and flying down the red and black striped lanes replenishes your racecraft's energy meter at the cost of a slightly slower lap time






The bleak, urban Gare d'Europa track is the first Rapier-class circuit, set on a disused French Metro line. It's maybe too dark and moody for its own good, as corners are often difficult to pick out

circuits to the frustratingly hard later ones. And with such little margin for error, progress was tough.

With *Wipeout 2097*, Psygnosis has clearly tried to make amends by introducing three different classes of circuit. Each class has two tracks, one slightly tougher than the other. The Vector-class tracks are straightforward and you can take them at top speed without lifting off the accelerator once. Venom-class tracks have two or three bends which require deft use of the airbrakes, operated, as before, by the shoulder buttons. The Rapier-class tracks are monstrous constructions but the subtler grading of *Wipeout 2097* should make them feel more approachable by the time you've exhausted the previous four.

no serious complaint as this special edition delivers more than many sequels do and cements psygnosis place at the vanguard of british game design

The new tracks also greatly improve the twoplayer linkup game. The first two are ideal for linkup play as they're wide enough for passing and simple enough to enable combat tactics to be used. The fact that you can now knock into opponents without ruining your chances and use your weapons much more tactically makes for far more exciting races. All these seemingly insubstantial alterations count for a lot and make *Wipeout 2097* the best linkup game available for the PlayStation.

One of the unique selling points of the original *Wipeout* has also been revamped in 2097 – the soundtrack. Psygnosis must have spent as much money on schmoozing as on programming, as some big-name music acts can be found supplying the sounds in *Wipeout 2097*. Biggest scalp of all has to be The Prodigy, with their instrumental version of 'Firestarter' the pick of the new tunes. Other bands include The Chemical Brothers, Future Sounds of London, Orbital, Underground and Leftfield.

*Wipeout 2097* looks slicker, too. Replacing the small jet behind each racecraft is a mesmerising blue trail, complete with starlight-filtered flare. Explosions are now circular white shockwaves, and the cockpit voice now sounds like the computer in Wargames.

Like all the 'changes' in the game, these are not major shifts, but cumulatively they make *Wipeout 2097* more polished and more entertaining than its predecessor. The tracks are more playable but arguably less attractive and less spectacular – a judgement that could sum up this welcome but hardly essential follow-up. But for newcomers, that's not a serious complaint. This 'special edition' delivers more than many sequels do and cements Psygnosis' place at the vanguard of British game design.

**Edge rating:**

**Eight out of ten**




First of the Venom-class tracks is the Amazonian rainforest experience of Valparaiso, which features jungle fauna and Mayan temples



As before, only two views are offered in play, but the game cam is much more dynamic in demo mode

# Quake

"It'll be ready when it's ready." That's what developers id have been saying for the last year or so. Well, now it's ready. So is *Quake* worth all the hype or is it really just *Doom* on speed?





**The lightning gun wasn't available in the shareware version but was definitely worth waiting for (top)**

The only downside to the otherwise pragmatic and honourable practice of the shareware strategy is that it produces a nasty case of premature ejaculation among reviewers. Admittedly, in many instances it doesn't really matter (shit doesn't smell a whole lot better however long you hang around) but in the case of *Quake* it's like returning a verdict on the Wimbledon final after one set. Like it or loathe it, *Quake* is a cultural event of global proportions: a game that will not merely frag its way into the lives of millions (many more, in all likelihood, than even the mighty *Mario 64*) but is destined to shape the way a good many games will be in the foreseeable future. We've had the Qtest, two shareware versions and a leaked Beta. Now we have the real thing. There was never any doubt that it would be good. The question was how good?

quake is a cultural event of global proportions a game that is destined to shape the the way a good many games will be in the foreseeable future

Familiars of the shareware version will know something of the game structure already. Transported into the start area, the player is offered three hallways which determine the game's difficulty. Once that choice is made, entrance is granted to a further room, from which the four episodes are accessed: Dimension of the Doomed (the shareware episode), Realm of Black Magic, Netherworld, and Elder World. Contrary to expectations, the episodes do not have to be completed in order, but since they get progressively tougher, it's best to comply with the natural sequence. At the end of each episode you collect a rune: collect all four and you get to confront your nemesis, Shub-niggurath, in his lair.

Depending on what sort of rig you're packing, *Quake*'s graphics will either have you agape in astonishment, or posting '*Duke Nukem* rules' messages on the Net. Powering what is arguably the world's most advanced 3D engine, complete with z-sorted textures, perspective-correction, dynamic lightsourcing, and polygonal enemies, is not a job for a 486. id claims that any Pentium-class machine with 8Mb RAM is sufficient to run *Quake* in its default (320x200)



**Even next-generation gameplay still has to rely on old-fashioned bosses to try and stop the player finishing too quickly. Although admittedly, the *Quake* bosses may be the first to actually frighten the player or make them jump – even Bowser in *SMB64* never managed that. You'll need more than grabbing tails and spinning to dispose of these freaks**





**Unlike *Duke Nukem 3D*, you won't be able to finish *Quake* without making use of the new look up/look down feature (above)**

mode but frankly, in low-res *Quake* is a mess of chunks. A P100 with 16Mb is probably the acceptable minimum. However, if you've got the kit, *Quake* is probably the most visually impressive game you'll have ever seen. The levels, which range from brutalistic military zones, to gangrenous medieval dungeons, to intricate neo-Gothic fantasias, are awesomely realised. Even if bereft of foes, *Quake*'s worlds would make splendid tourist attractions – just wander about marvelling at the play of light and shadow, the latticeworks of stone, the stained-glass domes...

This luxurious veneer may inspire the appropriate dread and reverence, but it's what lies beneath – the physical arrangement of the levels – that really counts, and it's here that the full 3D makes its impact. Although the essence of the gameplay has remained fundamentally unchanged since the ancestral escutcheon was forged by *Doom* (kill, survive, discover), the quality and variety of the experience has been greatly enriched. *Quake* is definitely not a corridor game. These levels are a veritable imbroglio of bridges, galleries, gangways, lifts, moving platforms, teleporters, concertina stairways and watery labyrinths. Not to mention the fiendish traps (crushing ceilings, trapdoors, lunging spikes and the like) which beset your every step. One particularly spectacular stage, The Wind Tunnels, has you sucked through a maze of giant ducts and belched, totally disoriented, into cavernous chambers. Another has you trapped in a grinding medieval elevator shaft plunging downwards as zombies drop on you from above. It's not just that the gameplay is more involving than previous efforts in the genre; it also requires a good deal more skill. Jumping, falling, swimming, and shooting up and down on the move are integral to your negotiation of the terrain. Six degrees of freedom has its price, though. Keyboarders beware: this game is for mice and men only.

its not just that the gameplay is more
involving than previous efforts
it requires a good deal more skill too



**Even in extreme close-up, the polygons don't pixellate. Bear in mind that if you do get this close, death will normally follow pretty quickly**



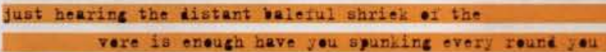
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In Deathmatch mode it's often best to get a rocket launcher and make for the high ground. This is level one, stage two






Many of the monsters have been detailed in **Edge** before, but the full version introduces a few new faces to what was already the most fearsome rabble of nasties in videogame history. Grunts are joined by Enforcers (bigger gun, smaller brain), the waters are now patrolled by gnashing Rotfish, Death Knights dwarf their shareware brethren, and Spawn ooze out of the floor. But worst by far are the Vore: grotesque hybrids of man and spider which hurl heat-seeking balls of spikes. Just hearing their distant baleful shrieks is enough to have you spunking every round you've got into an empty room. As for the weapons, the only new addition is the very tasty Thunderbolt (*Quake*'s BFG) which discharges a jagged knife of lightning that doesn't stop until it strikes a solid object. Since flesh doesn't count as a solid object, you can imagine what carnage it inflicts on a queue of Ogres.

The one completely new feature is the inclusion of music - Trent Reznor and Nine Inch Nails provide a brilliant ambient industrial soundtrack that weaves perfectly behind the crackle of torches and the blazing noise of the hardware.

So what does it all add up to? Well, if you're after an RPG, you're knocking on the wrong door. *Quake* is an action game. Pure but not simple. Dedicated to the production of fun and fear. That's what id do better than anyone else. Much better.

It's hard to believe how good the full version gets. If you didn't know where *Quake* could go after the first episode, then just think bigger, badder, more beautiful. id has benefited greatly from bringing two further designers into their Texan cabal, and the 25-odd levels (excluding the six special Deathmatch arenas) display an amazing depth and diversity of ideas. You'll play this lot a million times over, and the only reason *Quake* can't be awarded a perfect 10 is that id owes so much to another game. One of its own, as it happens. You know the one. It'll be on your hard drive somewhere for sure. Unless you've deleted it to make room for *Quake*...

**Edge** rating:

**Nine** out of ten



The game is only just out and already there are patches on the Internet allowing you to change it

| | |
|---|---|
| Format: | PC |
| Publisher: | GT Interactive |
| Developer: | id |
| Price: | £40 |
| Release: | Out now |





There's even a patch that lets you persuade all the monsters to join you so that whenever you're attacked they will have a go at the aggressor. This also works in Deathmatch mode against other players

# Metal Slug

*Green Beret* was great fun ten years ago, but surely a similar game could not impress today's 3D-obsessed gamer? Joining the old school of sprite-heavy Neo-Geo games comes *Metal Slug*, a home version of the SNK coin-op shoot 'em up



*Metal Slug*'s six missions take in rivers, canyons, jungles and rope bridges, lending great graphical diversity to the action. It's a pity the game is so easy to finish, even with just four continues











**The game includes some great visual sequences. Here, the players are blown off a bridge onto a boat**

The Eighties: a time when true 3D graphics were the stuff of dreams, when polygons were just things your maths teacher talked about, and when the 2D horizontal shoot 'em up was firmly in its heyday. Now, thanks to SNK's trusty six-year-old trusty sprite-shunting technology and thirdparty developer Nazca, *Metal Slug* is here, boasting six stages of retro shoot 'em up chaos and a host of amusing touches.

In fact, *Metal Slug* is an addictive and totally hectic game which, with every scroll of the screen, brings in some new enemy or graphical set-piece to keep the player plugging away. In terms of staple shoot 'em up features, *Slug* has the inevitable list of weapon power-ups, including a heavy machine gun, a rocket launcher and a great flame-thrower. There's also a healthy arsenal of different enemies: soldiers, tanks, motorcyclists, helicopters, and even biplanes and frogmen.

A few nice touches have been carefully nicked from other games and then expanded on. The player has to free hostages as in *Commando*, the difference being that here they give you weapons. You can also get in a tank, *à la Ikari Warriors*, but this one can jump and has power-ups (incidentally, the twoplayer option in *Metal Slug* is also a tremendous laugh – as it was in *IW*). Finally, and most significantly, *Metal Slug* has much in the way of humour. For example, enemy soldiers often sit around talking or cooking, but when they spot the player, they leap up, scream, and run away. It's a great touch which ensures that you're always checking new scenes for comic moments.

As is often the case with Neo-Geo games, though, *Metal Slug* ultimately suffers from its coin-op origins in that it only takes a few hours to complete. This is a shame, as there are plenty of great ideas and some beautiful scenery in the game. Ultimately, though, *Metal Slug* is an imaginative, humorous and enjoyable step back into the past – a brief glimpse at the way things used to be. Brief, unfortunately, being the operative word.

**End-of-level baddies range from sunburnt Rambos (inset top) to huge gunships (above)**

*Edge rating:*

**Six out of ten**

| | |
|---|---|
| Format: | Neo-Geo CD |
| Publisher: | SNK |
| Developer: | Nazca |
| Price: | ¥7800 (£50) |
| Release: | Out now (Japan) |

## A meeting point for media capitalising on the digital entertainment revolution

# nuMedia

in association with ocean

Videogames are obviously the most immediate point of call for many, but for those with a more eclectic interactive entertainment diet, there is a burgeoning range of CD-ROMs now offering interesting alternatives. Interactive cartoons are hugely enjoyable and this month's *The Simpsons Cartoon Studio* entertained the **Edge** team just as much as any of the latest games (well, it was a close). Plus, **Edge** digests more manga, a French CGI cartoon and a CD-ROM dedicated to ID-4 fans.

Any self-respecting technofile should not disregard **Edge**'s selection of music, either. For those stuck in the guitar-based groove, fearful of musical evolution beyond of the rock dinosaur, count on **Edge** to provide a range of dynamic, progressive and emotive music only made possible by digital technology pioneers.

## Film

### Burn Up W

- Cert 15
- A.D. Vision (30 min)
- Release: 31 Aug

The 'girls with guns and prominent cleavages' theme has been explored pretty comprehensively in Japanese anime, but the producers of new series Burn Up W clearly think there's more mileage in the genre.

Here, the girls, who talk like a bunch of airhead High School girls and seem incapable of clothing themselves properly, are members of an elite SWAT team in a kind of Die Hard meets Baywatch meets Clueless plotline.



Animation is annoyingly kept to a minimum, but the characters are well-drawn and funny, and the script is tight, but whether this will develop into anything more than a voyeuristic appreciation of the female form is debatable.



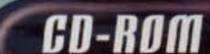
### Insektors

- Cert U
- Channel Four Video (93 mins)
- Release: 23 Sept/£9.99

Winner of the 1994 International Emmy (Youth Category), Insektors is an off-beat computer animated cartoon series from France. The story revolves around the Vegigreens, an eco-friendly bunch of insects who unfortunately have to share their home world, Black Planet, with a group of miserable eco-nasties called The Kruds.

The CGI, although slightly dated now, still manage to impress with some marvellously lifelike characters and strange, alien landscapes, but the scatological humour that might put some off - when children first see this, a few awkward questions may be raised.

## CD-ROM



### Batman Cartoon Maker/Simpsons Cartoon Studio

- Random House/Fox Interactive
- Both: Mac/PC CD-ROM
- Both: £20





**The *Batman Cartoon Maker* is strictly for kids**




**Now you too can become a budding Matt Groening courtesy of *The Simpsons Cartoon Studio* CD-ROM. All the characters are included**

The 'design your own movie' idea isn't a new one. A plethora of animation titles existed on the Amiga and ST - basic affairs allowing you to draw your own sets and characters and then create films. The latest batch, on PC, are a lot more promising.

Both cartoon makers, based on 'The Adventures of Batman and Robin' and 'The Simpsons' series, come with a huge inventory of scenes, objects and ready to animate characters to make the whole thing a lot more user-friendly. In minutes you'll have picked a scene, filled it with background props and placed your characters on top, getting all the boring detritus of animation out of the way. Actually making the cartoons move is equally simple as the characters follow the mouse in their own way.

Both of the titles come with a basic editing suite so that cartoons can be cut and scenes changed; you can even have opening and closing credits. Some may find the *Batman* CD a little too basic, though. Obviously aimed at children, many of the features present in *The Simpsons* - like the possibility of having two characters moving at once - are not available here. Also there are no sound files in the *Batman* product. If you want the characters to speak, you have to provide their voices with a microphone or write out speech bubbles. *The Simpsons*, on the other hand, has a huge range of words and phrases from all the characters.

Despite their simplicity, both products are great fun and, at roughly half the price of most videogames, good value. A Beavis and Butthead version (that doesn't 'suck', naturally) would make a great follow-up.



## Nikon Digital Camera

**Manufacturer:** Nikon
**Release:** TBA
**Price:** £440 (1Mb), £550 (2Mb)

Nikon has been producing high-end digital cameras since February 1995, but recently the number of non-professionals interested in the technology has grown. Accordingly, the company has developed two simpler, more stylish models for people who aren't photographers, but are interested in viewing their photos on a PC.

The Multi-input model is the better of the two. Not only can it send photos to your PC via a SCSI cable, but it also comes with its own 2.5inch colour screen - so you can view the images when ever you like it. Better still, the camera has an audio recording function and a memo pad so each of the 125 images that it is capable of storing, can be accompanied by written and spoken commentary. The PC Card model is slightly simpler, with fewer features, but you can plug it into an internal PC card drive and download photos almost instantly. Ideal, in fact, for those last minute videogame show reports that **Edge** sometimes crams in without time to develop traditional film...

Both models include a range of features like auto-flash, self-timer and macro lens, and according to Nikon, 'feature a vertical orientation design'. **Edge** is not quite sure what this means, but apparently it 'facilities easy pocket portability'. If you feel tempted, though, do make sure you're wearing the baggies to prevent the inevitable 'Are you pleased to see me or is that a Nikon Digital SLR in your pocket?'

**Nikon's digital cameras are compact and one model includes an LCD screen**

**Nikon Digital SLR cameras** • Contact tel 0800 230220

## JVC UX-1000

**Manufacturer:** JVC
**Release:** Available now
**Price:** £270

Ever since the arrival of the CD, hi-fi systems have been getting smaller and smaller - freed from the restriction of having to include a comparatively large record turntable. The latest JVC midi system may just have taken this obsession with compactness to its obvious conclusion. The UX-1000, which was recently awarded 'European Compact System of the year 1996/97' by EISA, measures just six and a quarter inches in height and five and a half inches in width.

Importantly though, JVC is adamant that the system's diminutive stature has no effect on sound quality. The UX-1000 features JVC's Active Hyper-Bass 'Super' Pro sound system, Hyper Neo Olefin cones and bass-reflect speakers all ensuring that very loud things can come from small boxes. The system also includes AUX input/LINE output terminals and a one bit PEM DD converter CD – which may or may not be important, depending on how much of an audio techie you are.

For those who's lives are not radically affected by the presence of LINE output terminals, the UX-1000 also includes an FM/MW/LW radio with a 15 preset tuner, and, best of all, though, a remote control. Which means, in order to use this incredible tiny system, you don't have to try and remember where you put it. But don't forget where you leave the remote control.



**JVC's ultra compact hi-fi system – for music lovers who don't lust after big woofers**

**JVC UX-1000** • Contact tel 0181 450 3282

## Inside Independence Day -The Making of ID4

- Fox Interactive
- PC
- October, £20

Let's get this straight. Independence Day is not 'a Star Wars for the nineties' as the press are wont to hail it. It's a good film, funny in parts (if you can stomach Yanky, gung-ho camaraderie), suspenseful in others, but it's not an classic. There's something missing. And the same could be said about this CD-ROM.

To be fair, all the ingredients are here: interviews with the cast and crew, onset photos, production notes, drawings, set designs, pages of text about UFOs and the history of the film. However, despite the obvious attempt at depth, The Making of ID4 looks like a Web site - and why should you pay 20 quid for something which you could view on the net for the cost of a phone call?

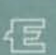
Perhaps the problem is the lacklustre presentation. There's a static main menu screen with lots of topic option icons (rather like a Web site). You click on one, read the text, look at the pictures, maybe follow up the topic by clicking an icon which links you to information held in another sub-menu, then you go back to the main screen again. Not exactly a thrilling interactive guide to the movie. Furthermore, horrible tacky golden fonts are used throughout. Which is virtually unforgivable in **Edge**'s book.




**Sadly, the quality of the presentation falls way short of the Hollywood film**

Sci-fi buffs will no doubt pour attentively over the behind the scenes stuff (including some great plans of the mothership and Area 51 labs), but there's not much here which couldn't be found in a book of the same title. There are some QuickTime movie interviews, but these are very short and look as though they've been taken from a TV programme. In fact, throughout the disc, you never really get the feeling you're being let into exclusive secrets about the film.

In terms of CD-ROM pricings, however, £20 represents a good buy for obsessive fans of the film. Despite the boring presentation and disappointing interviews, there is a reasonable amount of information here to explore.














***The Making of ID4* provides a comprehensive, if rather poorly presented, insight into the blockbuster, Independence Day. From storyboards (left, top and above), through photo stills of the movie itself, to comments from the actors, this is sci-fi meat and potatoes**

Continued next page

Continued

## books

### e-mail: a.love.story

- Stephanie D Fletcher
- £6
- Headline
- ISBN 0-7472-5534-2/246 pages

Edge readers who have at any point in their education been compelled to digest the gargantuan slab of gristle that is 'Pamela', Samuel Richardson's seminal eighteenth century epistolary novel will remember how they begged the Lord for mercy and bargained their souls with Satan. 'Take me, oh Prince of Darkness. I would rather do anything than read another page of this book.'

'Anything?' says the Dark One. 'Very well...' He reaches behind him and produces a slim paperback. 'Then you shall read this instead.' You eagerly seize the book and it's called E-mail: //a.love.story//. The novel that's taking America by storm, apparently (well, according to the publishers anyway). It's a romance set on the Net. Presented in the form of e-mail exchanges! It's Pamela for the nineties! How witty of the Devil to choose this. And how clever of you to have sold your soul to him.

It's a story about a woman called Katie who logs on to a BBS one day and, before she can hit Alt-F4, falls in love with a kinky cardiologist and a Texan cowboy-poet. What is she to do? She must write things like 'I have used my sexuality and I have used you, John, to try and fill the gaping hole inflicted by my self-loathing.'

You force yourself to read on. But you can't. It's too bad... too trite, contrived, facile, mawkish, dull, smug... 'Pamela!' you cry, 'all is forgiven!' But as Satan's laughter rings around you, you know it's too late. Don't even think about it.

### The Fugitive Game

- Jonathan Littman
- £18
- Little Brown
- ISBN 0-316-52858-7/383 pages

Without some background knowledge of the case against Kevin Mitnick (the notorious hacker arrested last year after finding his way into dozens of classified Government computer systems), The Fugitive Game will be confusing. The book recounts the telephone conversations that Littman had with the hacker, prior to his apprehension, so reading about that apprehension in the book Takedown (see E35) would probably be a wise move.

In fact, reading the two back to back gives you the best idea about the players involved and you can make up your own mind about the inconsistencies that arise in their respective accounts. More than anything else, The Fugitive Game provides the first real profile of who Mitnick really is - his motivations, his expert views on our wired society. He clearly doesn't fit the stereotyped image hackers have in the press (junk food eating, overweight, etc). It also allows Mitnick to speak for himself. Littman recounts almost verbatim what was said during those pre-arrest chats, and Mitnick comes over more as an ordinary Joe than the isolated nerd from Takedown. He has a job, friends and relationships. But he was also wanted by the FBI. These contradictory elements make him a multi-faceted personality and not the anarchist the press make out.

But then the perpetuation of that myth may just have been engineered by Mitnick's enemies, if what Littman touches on is to be believed. Shortly after the hacker's arrest, Tsutomu Shimomura and John Markoff secured a film deal for Takedown worth in excess of $650,000. Would that have happened if the case hadn't been so (in)famous?

## Music



### Rebirth of Cool 6
Various

Fourth & Broadway

Any CD which pitches Lamb's jumpy drum n' bass concoction 'Cotton Wool' against Alex Reece's smooth Bjork-esque Feel The Sunshine is worthy of some attention. Rebirth of Cool 6 does just that. Indeed, the best thing about this compilation is that the tracks have little in common except coolness: if you had heard Horizons by L.T.J. Bukem and D.J. Pulse's Street Player separately, you'd never place them on the same CD - luckily someone did. For ex-indie kids, Rebirth would make a great introduction to infinitely more varied forms of aural pleasure.




### Winx
Left Above The Clouds

XL

For those familiar with **Josh Wink**'s chart stormer, Higher State Of Consciousness would probably expect the dreadster's debut album to be a full-on acid trip of unmatched intensity. In fact it's not. It's far better than that. At 28 tracks, though, this is no brief excursion..

Interspersed with spoken dialogue that occasionally veers towards the self-indulgent, Wink's ambient range of techno-trance does have its own unique flavour that gradually hooks. Combined with the spooky cackling samples on Don't Laugh and some trademark 303 insanity, this is dream-like but intense.




### Earthtrance
Various

Positiva

Albums created by musicians donating tracks free of charge, rarely work. This compilation, however, is different. Produced 'in aid of the world's endangered forests', it brings together conventional techno pioneers (Speedy J, The Source Experience, etc) with Goaheads such as Hallucinogen and Man With No Name (who contributes a stunning track, Osmosis). And it's the ecological theme that is the common ground here. After all, to those artists who are no strangers to partying in forests to banging trance, the planet *must* seem truly worth saving.



### Archive
Londinium

Island

The number of trip-hop artists jumping on the Portishead bandwagon must be of concern to Archive, for that's undoubtedly one of the reference points that they'll have to live with. However, unlike most dubby beat combos, Archive have an ear for a good melody, and Londinium is a stormingly good debut album.

Perhaps the most outstanding element is the layer of rich string-led orchestration that underpins the melodies and mellow rapping. Try and find a filler on here you'll be wasting your time. Simply beautiful.

# Street Fighter Zero 2

While everyone waits anxiously for the much-fêted *Street Fighter 3*, Capcom's developers are happy to keep the 2D *Street Fighter* series going with this latest coin-op conversion for the PlayStation




**Ken gets the upper hand with a fireball to get the first attack bonus – not that points ever mattered in *SF***

And so the *Street Fighter* story goes on and on. While every other gaming company producing beat 'em ups concentrates on polygon-packed 3D games, Capcom seems keen to adhere to its 'if it ain't bust, don't fix it' strategy. If it wasn't for the fact that everyone knows *Street Fighter III* is in production deep in the company's hallowed halls this would be an indication that it was in deep creative trouble.

But as this month signals, *Street Fighter III* is indeed on the way – and this is just another case of Capcom proving that there's more life in the 2D fighting genre that has seemingly been abandoned by just about every other company.

if we didnt know that capcom had streetfighter 3 up its sleeve we would think that they were in deep creative trouble

Everyone else may have run out of ideas when it comes to a 2D cartoon fighting game, but Capcom has come up with a few brilliant new ones, plus the final tweak to their basic *Street Fighter* engine to produce what is certain to be seen by all as the finest *Street Fighter* game to date.

First, there are new characters – arguably the most important ingredient of any fighting game sequel. Initially the *Street Fighter* legend revolved around a paltry eight characters – now there are an overwhelming 18 would-be opponents in all to choose from, with all the old *Street Fighter Zero* characters joined by Dhalsim from *Street Fighter II*, Gen from the original *Street Fighter* (remember the punchable buttons?), Sakura, a comedy version of Ryu, Rolento from the ancient but still very playable *Final Fight* and the mighty Zangief from *Street Fighter II*.

While it's initially disappointing not to see any *original* characters from Capcom, the developers have done a lot of work on these new ones to make sure they fit into the game perfectly. As an added bonus, there's no longer any need to perform that button-breaking cheat to access Akuma, Bison and Dan: they're now all instantly selectable.

As well as the character redesigns, the backgrounds have been overhauled, so there's more colour and a lot more going on – parallax effects are particularly impressive. And if all this fails to impress










**Chun Li adopts a new more politically correct dress sense in this game. Gone are the skimpy skirts and long exposed legs as in the other *Street Fighter* games. To the right here, Gen looks like he may have been borrowed from *Virtua Fighter 2*. Now if only he was portrayed as a drunk, then Sega could sue...**

| | |
|---|---|
| Format: | PlayStation |
| Publisher: | Capcom |
| Developer: | In-house |
| Price: | ¥5,800 (£40) |
| Release: | Out now (Jap) |




To avoid any confusion in same character-versus-character fights, each fighter now has four colour schemes. In another new twist, this is one of the first times that a character has a weapon that he can use in battle (right)

you, the fights taking place in a manky public toilet complete with 'active' onlookers almost certainly will...

The chain combos, which proved fairly unpopular and confusing in *Street Fighter Zero*, have thankfully been ditched, with the exception of one Guy's four-hit one. To replace them, though, you can now pull off new devastating super combos. There are three stages of super combo that can be executed when you manage to max-out your super meter, a control that is affected by your fighting performance. The later stages need more complicated button combinations, but they're still a lot easier to reach than the earlier chain combos ever were.







The backgrounds in *Street Fighter Zero 2* are wonderfully realised. This grubby public lavatory is one of the most imaginative in the game

The more special moves and combos you do, the faster your meter increases - all standard beat 'em up fare. The super combos can also be put into a normal combo for that final devastating touch that will leave almost any opponent reeling.

As with just about every *Street Fighter* game in the series, *SFZ2* is faster than its predecessor. The lowest speed setting makes the game the equivalent of the original *Street Fighter Zero*, while the extra turbo mode takes it into a completely new dimension of fast fighting. Somehow, though, it still doesn't detract from the power of the original game.

In retrospect, it would have been very easy for this to have been the final nail in the coffin for the *Street Fighter* series. After so many instalments, anything less than near-perfection would have been considered disappointingly second-rate. It was imperative that Capcom's development team took care to avoid being accused of just cashing in on a popular series with as little work as possible.

As **Edge** expected, though, they have pulled it off with ease. The attention to detail in the gameplay is as good as ever - it always leads to exciting fights between experienced players who access all the combos and super combos, and know just when to use them in battles. That said, it can be all a little intimidating for inexperienced fighters who will have to learn the moves quickly - or be left in a quivering heap on the loser's screen.

With all the new features and the tweaks to the basic *Street Fighter* engine, Capcom have come up with the goods once more, and with a game that is superior to all that have gone before - from Capcom at least. Taking into account the limitations of the 2D fighting genre, it's hard to see just what else Capcom could do to make a better 2D fighting game.

Still, this is possibly an ideal time to let the *Street Fighter II* series rest once and for all. This latest version is easily the best one yet and potential buyers will be hoping that an update won't follow hot on its heels in a few months time to render it prematurely obsolete. If that happens, of course, there's always *Street Fighter III to* look forward to...

**Edge** rating:

**Eight** out of ten









With all the new moves and combos there are still times when only an old-fashioned Dragon Punch will do

# Syndicate Wars

In these days sequels are spawned almost before the original hits the shelves. So it's refreshing to see a team take a few years to step back and plan a worthy follow-up to one of the most playable and violent games of all time

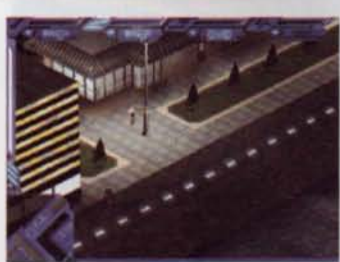






**Big explosions. That's what some of the levels in *Syndicate Wars* are all about. Huge, skyscraper-flattening, innocent-civilian-lacerating explosions that can literally flatten entire city blocks. Even if they aren't part of the mission, there's a sick fascination gleaned from triggering them anyway**





**The seedy city streets of a *Syndicate Wars* level. Soon to be made more colourful with blood and corpses**

| | |
|---|---|
| Format: | PC |
| Publisher: | EA |
| Developer: | Bullfrog |
| Price: | £40 |
| Release: | September |

And about time too. It's been an absolute age since anything has come out of top Brit developers Bullfrog - apart from the deluge of excuses for *Dungeon Keeper* being so delayed. But at least they've come back with a bang, quite literally, with *Syndicate Wars*.

The original is still rated as one of the finest games ever, with both the Amiga and PC versions selling in huge numbers. It eventually went on to be converted to just about every machine imaginable, except the PlayStation and Saturn, but they're getting something much bigger and better. Bullfrog has obviously taken heed of the 'If it ain't broke don't fix it' adage when it came to the gameplay in *Syndicate Wars*. It's basically the same as the original with the time really being taken on the weapon design and general graphical look.

In SVGA, providing you have P133 or preferably higher, the game keeps the clean, crisp look of the original - but moves the camera angle in slightly to make everything bigger and more detailed. While this does cause slow-down on a low-end Pentium, it makes the game run at about the speed of the original, so it still proves extremely playable.

Bizarrely enough though, it's in VGA mode that *Syndicate Wars* really comes into its own. Here the graphics really create the dark and seedy look and feel of the *Syndicate* world. It spawns a murky atmosphere that makes the game more enjoyable. The video screens still work properly and the explosions are just as outrageous as in the SVGA mode, but the whole look is just that bit *seedier*.

The missions in *Syndicate Wars* would be nothing without their weaponry, and Bullfrog have really gone to town here. The weapons range from the barbaric (explosive razor wire) to the just plain ridiculous (like the cataclysm that can bring down entire skyscrapers with one blast - and you should see what they do to people). But *Syndicate Wars*



**A new feature with the Persuadatron is that not everyone will fall for it. Some citizens will run away screaming for help when you approach**





**Now you see it. Now you don't. The only way to deal with that inner city slum is to insert a few agents armed with cataclysmic weapons and sit back and watch as they have the desired effect (right)**










**The equipment research doesn't play such a vital role in this new version. You can even set it on auto**

offers so much more than just a ruthless shoot 'em up, though. Every mission you undertake will have to be meticulously planned out (which route to take to your objective, whether to persuade people with your persuadatrons or not, which vehicle to take, how to get into the cities, etc). Then there's all the research you have to do to acquire new weapons - a much overlooked, but still essential part of the game.

With all this taken into account, the gameplay in *Syndicate Wars* is almost unbeatable. Controlling your team of cyborgs couldn't be easier, and all the missions are fairly free-form, so as long as you achieve your objective, it doesn't matter how you go about it. You could go on a murderous rampage, wiping out all potential opposition, and then go for your main target or you could plan it out, persuade dozens of innocent people to join your quest and then go for the target.

> you cant rush in with all guns blazing when your opponent has rigged razor wire at the end of the alleyway you are running down

The network play is also something different to other games. Tooling your team up and setting traps and ambushes for other players raises this above most other multi-player games. You can't just rush straight in, all guns blazing, when your opponent has rigged up razor wire at the end of the alleyway you're running down. Unless of course you had the foresight to send someone around the back armed with enough explosives to level the city block, and anyone in it.

*Syndicate Wars* brings Bullfrog right back to the forefront of the development community. It's a rare treat for a game to look this good in either VGA or SVGA mode, yet still retain a level of playability that will keep anyone hooked for weeks, maybe even longer. The mission structure is *perfect* and the weapons are always entertaining in their own right.

While the wait for *Dungeon Keeper* goes on, it looks as though this thinking man's shoot 'em up will be more than up to the task of keeping PC gameplayers glued to their monitors. This is arguably one of the best sequels ever created and if Bullfrog's claims of indentical PlayStation and Saturn versions hold true (due early next year according to current plans), then that will be another first for the distinguished Guildford team...

**Edge rating:**

**nine out of ten**



**As before, the tactic of persuading people to act as cannon fodder serves you well in most missions. It makes the job easier when you don't have to worry about being shot yourself – just let those suckers die**



**The Syndicate train service doesn't suffer from strikes, but it will occasionally give in to explosives**

A flood of jetski games for the home looks like being replicated in the arcades as Konami prepares to pursue rivals Sega and Namco. Plus, Taito and Capcom enter the low end, 3D beat 'em up fray...

# Jet Wave

Skiing and surfing games seem to be immensely popular in Japanese arcades at the moment, especially those with elaborate cabinets. Namco has characteristically led the field with its *Alpine Racer* and *Alpine Surfer* titles: the former featuring two ski's for the player to stand on, the latter a snow board. Now Konami has joined the race with jetski simulator, *Jet Wave*.

Similarly to the Alpine series, the most prominent thing about *Jet Wave* is probably the full-size, hydraulic mock-up of a jetski which the player stands on to play the game. Apparently, the sensations from the mock-up are not quite as realistic as they may have been if this were a jet-bike, but the hydraulic piston still packs quite a punch. Unfortunately, the novel control method may alienate more players than it attracts: tall players will find it difficult to wrestle with the ski as well as watch the screen, and more puny gamers may be put off by the fact that quite a bit of physical strength is needed to control it.

As for the game itself, the graphics are reasonably good with a realistic looking jetski featured on screen and some nice textured water effects. The spray from the vehicle is rather good too. There are three courses to choose from, but, as yet, no link-up mode so you can't race against other people. However, Konami may introduce a link-up cabinet at this year's JAMMA.




***Jet Wave*'s water effects and motion are fairly convincing although Konami clearly has some catching up to do in the polygon business**




**Due to Konami's relative lack of expertise in the 3D graphics arena, *Jet Wave* falls short of the visual impact of Namco's forthcoming *Aqua Jet* (see next issue)**

| | |
|---|---|
| Developer: | Konami |
| Release: | Out now (Japan) |
| Origin: | Japan |

## Solar Assault

Another offering from the prolific Konami [illegible] to cash in on the success of Taito's 3D polygon shoot 'em up Ray Force (E35), *Solar Assault* will be one of many new games unveiled at JAMMA.



## Warzard

Capcom's latest 2D board, the CPS III, may be the platform for its third installment in its *Street Fighter* saga, but the first game revealed to take advantage of the new technology is the fantasy fighting game, *Warzard* (to be retitled *Red Earth* in the US and Europe) – see news.



# Fighter's Impact










It's not yet known if this latest game from the Taito stable is its first to use PlayStation-based coin-op technology, although it does look like it

To accompany *Psychic Force*, Taito's offbeat 'floating cube arena' fighting game, the company has developed *Fighter's Impact* as a more traditional 3D beat 'em up. Here, the fighters are confined to the ground, but Taito has introduced more side step movements to take fuller advantage of the 3D arena. There is also a dynamic, multi-angle camera to fully emphasise this move away from totally linear combat.

Taito has also introduced some gameplay innovations in *Fighter's Impact*. For example, the player can choose from eight fighters, but each can draw from three different fighting styles: Martial Arts, Jujitsu or Tae Kwon Do. For each of these, characters wear different costumes and adopt totally different techniques, so, in effect, there are 24 fighters. *Fighter's Impact* offers players the chance to make up their own combos, however, to prevent continually stringing together the same patterns, the computer stops any combo if moves are repeated. Taito hopes this feature will force players to be more creative and strategic. If it works, the days of random button pushing frenzies may be over.





***Fighter's Impact* fails to meet the visual detail of its previous Model 2 fighter *Dead or Alive***



| | |
|---|---|
| Developer: | Taito |
| Release: | Out now (Japan) |
| Origin: | Japan |

# Street Fighter Gaiden

## X-Men Vs SF

Continuing Capcom's current assault on the 2D fighting game market is the potentially huge licence of X-Men Vs Street Fighter. To be revealed at the JAMMA show this month (see E39), the game includes 17 characters and even the ability for two-on-two play. More details next issue.



| | |
|---|---|
| Developer: | Capcom |
| Release: | TBA |
| Origin: | Japan |

Six months ago, Capcom told **Edge** it would be unlikely to create a 3D version of Street Fighter, because polygons could not recreate the level of characterisation sprites allow. However, the pressure of constant derision must have taken its toll: *Street Fighter Gaiden* is basically Capcom's answer to critics who suggest the company is only capable of depicting its legend in 2D.

Strangely though, *Gaiden* is actually a hybrid of 3D and 2D components. In terms of control method and available moves, it is very similar to *SFII* - the six button control method remains, and the blocking system is virtually identical. Furthermore, despite the polygon characters (which don't seem to have lost too much character in their transition to 3D), the backgrounds are still 2D, giving the game a weird, anomalous look.

Given the game's heavy reliance on 2D moves and overall style, it is questionable whether *SF Gaiden* will silence Capcom's critics. It is known, however, that *SF Gaiden* has been in development for quite a while at Capcom, initially as a 2D game. Perhaps *Gaiden* has surfaced now as a bridge between Capcom's 2D past and 3D present.

Whatever the case, *SF* addicts will no doubt jump feverishly on another SF title, regardless of its origin.



A polygon Ken unleashes a fireball at new skeleton-suited character Skullo






It's highly likely that *SF Gaiden* uses Sony's low-end, PlayStation-based coin-op board

# Nichibutsu Arcade Classics

**As much a place of homage for distinguished videogames of old, retrogaming is also proving to be dumping ground for the more obscure 'classics'**



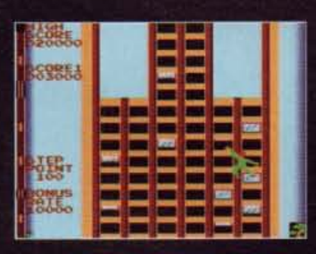

**Meeting the boss in *Moon Cresta* sibling *SFX* (far left). Left and above, *Frisky Tom* and it's near identical, but near impossible sequel**

This had to be the oddest retro collection yet to grace the PlayStation or any console for that matter. **Edge** isn't even quite sure that three of these games ever appeared in arcades. What you get is the classic vertically-scrolling shoot 'em up, *Moon Cresta*, archetypal climbing game, *Crazy Climber* and much-copied plumbing arcade puzzler, *Frisky Tom*. They're the same games that appeared on the SNES collection of the same name a year or so back and you'd be hard pushed to spot the differences between the Nintendo and Sony versions. The titles are all big coin-op names - in Japan, anyway - but the same can't be said for the three nominal nominal sequels to these games which flesh out the package.

*SFX* takes all the sound effects from *Moon Cresta* and puts them in a game that's like *Gaplus* on Valium. *Tom's Strike Back* is almost identical to the weird voyeuristic plumb-'em-up *Frisky Tom*, except where the original was astonishingly easy (work out how to do screen one and you could plough straight through), the sequel is unbelievably difficult, with kamikaze rats divebombing you whilst you try to do three different things at once.

*Crazy Climber '85* is both the most obvious sequel and the best game on the entire pack. The nightmarishly strange control system that all but condemned it to death in the arcades is rescued here by clever use of the Playstation's shoulder buttons, enabling the naturally addictive skyscraper-scaling gameplay to shine through.

Nostalgics will buy this just for the opening fanfare of *Moon Cresta*, but students of pure gameplay theory (and its relation to harsh arcade economics) won't get better research material than *Crazy Climber* for quite some time.





**The original *Crazy Climber* (top) and the souped-up follow-up are both retro at its finest**

| | |
|---|---|
| **Format:** | PlayStation |
| **Publisher:** | Nichibutsu |
| **Developer:** | In-house |
| **Price:** | ¥5,800 (£40) |
| **Release:** | Out now (Japan) |

## Toaplan Classics

**The world's premier designer of vertical shoot 'em ups gets its 'Heli' catalogue reanimated**

Just released in Japan is *Toaplan Shooting Battle Volume 1* – a compilation of three well-respected games dating back to 1985. *Tiger Heli*, the oldest game here, is a rather crusty but well-liked vertical shoot 'em up. But it's the superb coin-op sequel, *Ultimate Tiger*, that appeared three years later (and was re-released in a twin-player version as *Twin Cobra*) that impresses the most with its relentless playability. The game arrived too late to be covered in depth – see next issue.









***SFX* (left) takes most of its gameplay concepts (and all of it's sound effects) from its illustrious parent (right), but adds a *Gorf*-style element of vertical movement, thereby eliminating most of the game's difficulty**

# Space Harrier

**Sega's floorspace-hogging graphics fest was a state-of-the-art coin-op sensation. But after all these years will it work in the home?**

**The two-headed Chinese dragon at the end of stage three (above) and his lesser relation from stage one (right)**



The game that pushed Sega to the forefront of videogames technology and started the company's love affair with custom cabinets is back. *Space Harrier* was AM2's pioneering 'event' coin-op that took over arcades and set the pattern for Sega's releases to this day. AM2's then-new sprite-scaling technology was at the heart of the game which was essentially a very simple into-the-screen shoot 'em up. And now, as part of Sega's 'Ages' project, this particular item from the back catalogue is getting a new lease of life on the Saturn.

You control the eponymous *Space Harrier* who runs or flies into the screen at breakneck speed with only a huge bazooka under his arm for protection. Now, many a game has been described as 'surreal' but few can lay a stronger claim than *Space Harrier*. It's not likely to make Breton, Bunuel and Dali rise from the grave but it does have some dazzlingly strange juxtapositions. The 'floor' of each level is a kind of Op-Art chequer board that shimmers at great speed below *Space Harrier*.

Coming at him are a truly bizarre collection of enemies that include single- and double-headed Chinese dragons, the stone heads from Easter Island statues, giant dragonflies, huge dodecahedrons, swirling masses of multi-coloured globes, jet fighters and giant robots to name but a few. Space Harrier was the ideal showcase for Sega's graphical inventiveness. Sadly, the gameplay just didn't match up.

The AI for the enemies was unforgivably predictable and made the game a walkthrough once you'd rumbled it. Every single enemy always fired straight at you so to avoid their fire all you had to do was keep moving, preferably in a wide circle so that their shots had time to pass you. No matter how fast or how packed the later levels were so long as you followed this simple tactic you could complete the game with ease.

The Saturn version has had to emulate code rather than take it straight from the original but despite this drawback it's practically a carbon copy of the original with all the bonkers graphics – and all those annoying gameplay flaws – surviving intact.




**All the enemies in *Space Harrier* followed the same pattern every game adding to its simplicity**





**A typical sortie of aliens (top) and the 'ride the dragon into the trees' bonus levels (above)**

| | |
|---|---|
| Format: | Saturn |
| Publisher: | Sega |
| Developer: | In-house |
| Price: | ¥5800 (£24) |
| Release: | UK: Jan/Dec |




**(Above) *Space Harrier*'s spectacular conception gave Sega's artists the chance to create a kaleidoscope of pulsating colours – pastels one stage, steely proto-cyberpunk hues the next – and truly bizarre graphics**




The wolves seem to be baying at Nintendo's door. What, with a disgruntled gaming public sick of shifting release dates (David Nunn **E**34, letters) and a development community sceptical of a seemingly retrograde step away from the popular CD format, it would be a shame if a machine as good as the Nintendo 64 wasn't a resounding success.

Having been a gamer since the heady (ie tedious) days of loading in 64K by cassette tape, I have finally found a machine that delivers the power to render an experience as good as the player's imagination. No other current platform offers flight simulator quality on a home TV as in *PilotWings 64*, plus the immersive experience of a fully interactive cartoon that is *Mario 64*. Doubt not unbelievers, the machine *is* truly next generation.

But what is open to question is the quality of future software releases and whether a realistic price can be maintained. It's going to be hard for the N64 to make inroads into a post-Christmas market saturated with systems, with software available at half the cost of cartridge. Here's hoping everyone can soon enjoy the N64 experience and not just the hardcore gaming community as **Edge** suspects.

**Mark Hughes**
**via Internet**

It's easy to see why developers are desperately smearing the N64. The CD market is much safer and can tolerate bad games.

So are we going to listen to them? 'It makes you question what value, if any, they place on third party support' says Tim Christian, MD Microprose (**E**36). Put a sock in it Christian. I've had enough of developers telling me what I want. These people just can't be bothered to compete, now you *have* to compete, and I don't give a shit how hard it will be for you. *Mario 64* has been created and is on the shelves. You may have gotten into a situation with Sony/Sega where you can produce as many mediocre CD games as possible without losing money, but *Mario* – a new benchmark – should rectify this.

It's the first 3D platformer Nintendo has ever made, and it beats everything else hands down. Developers wasted the Sony/Sega headstart in creative terms, and it's a sad state of affairs when *Mario* can be a bad thing in any way. If developers pull their fingers out and create something worth buying, we'll buy it. First example, *PilotWings 64* – courtesy of Paradigm Simulation.

Nintendo 64 as a platform should stimulate mass creativity, and if this frightens you, you should not be developing games. It's a tough market with the money involved, the quality has to be there. If you don't like it, stay away from 64bit.

**Ant Nemihm,**
**Oxford**

The point Tim Christian and other European industry pundits were making in the Nintendo news piece was that they cannot compete with *Mario* because of the costs involved. Not because of any deficit of talent (*Civ 2* and *X-COM: Enemy Unkown*, both Microprose titles, are up there on the same creative level as anything Nintendo has produced). Nintendo can afford to invest much more time and money on its game developments because its profit margins are larger (unlike third party developers, it has no royalties to pay on each cartridge it sells).

However, your initial comment that third parties are castigating the N64 because 'The CD market is much safer and will tolerate bad games' may hold some truth. If a developer came up with a *Mario*-beating game idea then it



**The *Mario 64 debate* continues. Ant Nemihm argues that developers 'can't be bothered' to try and compete with Nintendo and instead take solace in developing mediocre games for platforms that tolerate bad software**

would inevitably sell. Perhaps publishers are worried that, if the N64 takes off they will have to cease supporting their once a year moments of brilliance with plentiful B standard shovelware.

I've been an avid collector of your magazine since issue 1. You have good contents and an outstanding design language to your magazine. Lately however, you have changed the contents to include a few new things, not all of which I agree with. A case in point is the issue where you put a sticker on the cover that said 'Biggest Ever Issue - 140 pages'. To my disappointment, I found more ads than I could ever recall in your magazine. Is this where the extra pages went to? Also I've noticed that your writing and presentation style has changed somewhat. Has **Edge** had a reshuffle of employees lately? Lastly, while I welcome new articles in your magazine, I suspect that the sheer variety that you need to cover leaves little room to go into any article in depth. Even the questions & answers section (one of the best aspects of **Edge**) has been omitted. So please **Edge**, no more deluge of ads in your magazine. I'd rather you use those pages for game strategies or cheats if it ever comes down to that. You can't be that hard up for cash to finance your publication, right?

**Cliff Lew**
**via Internet**

Considering the fact that the videogames industry is in a constant state of flux and evolution. It is somewhat ironic that **Edge** (The future of interactive entertainment) should be berated for making small changes to its editorial content. Changes which have, incidentally, added to the page count rather than taken space occupied by older, more firmly established sections.

As for the 'Biggest Issue Ever' point, Edge usually contains around 80 pages of editorial - E34 contained 91. This means that, even without the adverts (which fund the high costs of production), it was bigger.

Despite your grievances, however, you will no doubt be pleased to note that Q&A is back, however, its continued inclusion depends upon the number of queries **Edge** receives.

In response to Mark Rogers' letter in E35 concerning control systems for disabled gamesplayers - had you watched *Beyond 2000* on Sky News (Sundays 1.30pm), you would have seen a doctor tackling this problem.

His solution was to apply special pads to any working muscles. For instance, twitch your left cheek to move left, twitch your right cheek to move right, flex your left bicep to move forward, and so on. This system is also used in rehabilitating people after serious accidents.

**Robert Moyses,**
**Germany**

**The issue of developing joysticks for disabled gamers, recently suggested in Edge, has prompted several responses**

Currently, I'm working as a student in Electronic Design at Cardiff University. For my final year I have to design a viable consumer product. After reading Mark Rogers' letter in E35, the idea of constructing a working control system for the physically impaired seemed an ideal project.

In order to complete such a project, there needs to be adequate research into market needs to make a commercially viable product. This requires feedback from market users to determine the best configuration for the control system. Though designed specifically for disabled users, the underlying requirement for the control system would be to offer enhanced control in complex games, while being very simple to use. This would make the controller attractive to both able bodied *and* disabled gameplayers.

The project has to include all the required details that are needed to manufacture the product, and I am hoping that it will be possible to bring the controller to the market after development. But in order to do this I will need the support of other **Edge** readers.

I'd really appreciate it if any disabled games players would write to me detailing their requirements for such a system, along with any able bodied users who are dissatisfied with the current control methods. Hopefully **Edge** will play an important role in bringing a much needed product to the consumer market.

**Matthew Webb,**
**Faculty of Art, Design and Technology, Llandaff Centre, Western Ave, Cardiff, CF5 2YB**

It is unlikely that a device designed with only disabled videogames players in mind, would become a commercially viable product, so you're right to aim your proposed control device at all gamers. If able bodied players could gain some benefit from it, the project would have much more chance of becoming a massmarket proposition.

Whatever the case, it is heartening to note that work is being done in this area. One of the most exciting elements of computer technology is that physical handicap simply needn't be a barrier. If advances in computer accessibility could be made through developing control methods for videogames, perhaps this industry would gain wider respect, instead of bearing the brunt of right wing 'what is this screen violence doing to our children' propaganda.

Recent issues of **Edge** have seen several discussions of 'retrogaming' whether re-releasing old games in 'classic' packs or giving them a facelift (such as *Tempest 2000*). I thought I would add my two cents worth here.

At various times my brother and I have owned an Atari 2600, C64, Sega Mega Drive, Atari ST, Amiga, Game Boy, Super Nintendo and Atari Lynx. Of all these, the machines I regard with most affection would be the C64, Amiga, and to a much lesser extent, my SNES.

Although I occasionally consider getting a PlayStation, or Saturn, I have not seen a single game for these systems that has inspired me enough to buy one.

It still amazes me that I can spend a whole day exploring my friend's C64 diskbox and not get bored. I don't know what it is that still captures my attention with these old games: is it nostalgia or 'gameplay'?

The last game that made me gasp was *Super Mario World 2: Yoshi's Island*, which **Edge** rightly gave a nine. For me, it sums up everything about gaming - you don't need hundreds of thousands of polygons, texture mapping and mip mapping to make a game entertaining. All you need is that certain inspired touch to make it really work.

No magazine is perfect, but I cannot think of another that covers the world of interactive entertainment as well as **Edge**. Professional, entertaining, and worth every penny. Modern videogaming demands high end machines, spectacular graphics and orchestrated sound - but at least **Edge** realises that it takes a human touch to make it all gel.

**Name and address withheld**

While there certainly were a number of marvellous titles available on the 8 bit formats, it would be grossly inaccurate to idealise that age as the halcyon era for videogames. Who would seriously swap their copy of *Tekken* for *Way of the Exploding Fist*? Who would go back to *The Hobbit* after playing *Monkey Island*? Yes, there were timeless classics like *Sentinel* and *Elite*, but these existed in a tiny minority.

You suggest it could be nostalgia which draws you to that box of C64 disks, not 'gameplay'.

*Continued next page*

Continued

**Edge** would have to agree. Nostalgia does tend to put a certain haze over the past whoever wrote 'schooldays are the best days of your life', for example, certainly wasn't at school at the time.

**E**

The 'next generation' consoles have for some time now been setting new standards for graphics and gameplay. As James Francis pointed out on his letter (E36), companies feel compelled to produce games in 3D and all that was 2D has been left by the wayside. This evolution in gaming has also been passed on to the media. Now, if a game doesn't utilise the machine's full graphics capability, it is deemed unworthy to be a 32-bit title. Indeed, in your review of *Gunner's Heaven* on the PlayStation (E22), you said that it didn't 'justify its existence as a next generation videogame'. I know it's an obvious thing to say, but expectations of a game shouldn't be pigeonholed by what a console can or cannot do.

Nintendo recently proved that the 2D platformer is a genre that has yet to die. Can a similar game ever be as successful on a 32bit platform? We *all* know that the SNES and Mega Drive were the sole domain for platform games.

It's a shame that top developers are reluctant to put as much emphasis into making first class 2D titles as they are for those in 3D.

**Nick Foreman, Teignmouth, Devon**

2D products will continue to have a great influence on videogaming as long as we continue to play on 2D screens. *Gunner's Heaven* was not marked badly just because it was a 2D game: *X-Men* and *Street Fighter Alpha* both scored well despite their lack of polygons. However, the fact is, 3D games sell and executive producers with shareholders to think about like games that sell. If you want to see more 2D titles, don't buy games like *Quake*, *Mario 64* or *Sega Rally*. Not quite so appealing now, is it?

**E**



**Nick Foreman claims that Edge's opinion of 2D games such as *Gunner's Heaven* shouldn't be based on the capabilities of a console**

After reading your article 'Quake and N64 suffer at hands of pirates', I just had to write concerning this issue.

I think it's about time that we stop things like the beta version of *Quake* getting on to the internet. People work hard on the game and then someone in the playtesting department decides to place it on the net for nothing.

You also mentioned how a Hong Kong company has created a device to copy Nintendo 64 games onto disk or a PC hard drive. I would have thought it was impossible for this to happen as the games are on silicon chips – but apparently not.

I own a SNES with a device similar to the one mentioned above called the Magicom. All you have to do is place a game in the top of the device and it copies the game on to disk in around a minute. Some games may require two disks, depending on the size of the game.

When I first bought my SNES, I was disgusted paying £60 for a game, but when I heard that someone was selling the device I bought one immediately and now have over 200 games.

I've had games at least two months before they come out in this country and only paid £2 per copy. A person I know has crammed over 150 games onto one CD-ROM and is selling copies for £30 each – but, of course you have to own a PC with a CD-ROM, as well as a SNES, in order to retrieve the games. I've heard of similar discs for the Mega Drive, PC Engine and the Neo Geo.

I know this is illegal, but I would rather pay £2 for a game than £60-70, and I bet a lot of other people would too. The device might cost £300 pounds or more, but think of the saving you will make in the long run.

**Name and address (not surprisingly) withheld**




***Quake*'s appearance on the Internet has drawn criticism from one anonymous reader. Unfortunately such sentiments are rather transparent considering his/her's dubious ethics regarding piracy (see letter, right)**

How can you possibly have the nerve to criticise the recent *Quake* incident when you freely admit to




**Can 8bit gameplay really hold a candle to 32bit, or is it just plain, tearful nostalgia? (*Way of the Exploding Fist*, above)**

being a software pirate yourself? Your letter presents the typical justification for piracy: that you only steal games (and, yes, it is stealing) because they are so expensive. Hasn't it occurred to you that games are expensive precisely because people pirate them? Piracy eats into profits and they have to be recouped.

While the 'piracy forces up prices' argument is not quite as straightforward as publishers would have us believe (how can a £45 price tag be seriously justified for a game when the CD it's printed on costs pennies?), software piracy is an insidious and destructive crime. If everybody thought like you, there would be no more videogames. It's as simple as that.

Of course, everybody would rather pay £2 for a game than £60. But most players recognise the months of hard work, talent and dedication that goes into developing games, and will pay out for the originals accordingly.

After reading your article, which quoted me, concerning memory, printed in issue 36, I would like to clarify my opinion on various matters, particularly in relation to the NEC VideoLogic board mentioned in your article. I believe that almost all graphics accelerator boards currently on the market suffer from the problem of having a limited amount of texture memory that is held separate from main system memory. This is and always will be a disadvantage compared to systems which have the textures in main system memory and employ some kind of texture cache rather than texture RAM.

I would like to point out that this is the *only* feature of the VideoLogic hardware that I can find any criticism of, and overall I am very impressed with the board. The current design allows 30fps at 640x480 in 24bit colour, using only 30Mb of main bus bandwidth, and has several features that make it the board of choice here at Tao Systems.

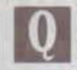
We also understand that even the texture RAM restriction will be addressed in later revisions of the hardware. Another problem with graphics cards is that most of them only allow the rendering of polygons to a fixed area of video RAM. While this is acceptable for games, it has several drawbacks for use in a general multi-windowed GUI environment.

The designers at VideoLogic addressed this issue from the first revision of the hardware by allowing rendering to anywhere in the PCI address space: this is a little known fact and allows the VideoLogic designers the approach of providing a board that doesn't require you to replace your existing graphics card, because it works with *any* graphics card, allowing them to keep the cost of their board cheaper than the competition.

I could go on, but I'd sound like an advert for VideoLogic! My main concern was that **Edge** made my comments seem biased whereas in my opinion VideoLogic has the best graphics chipset and PC add-in board solution of any of the current crop of graphics acceleration contenders.

**Chris Hinsley**
**Technical Director, Tao Systems**

**Edge** is aware of the power of the VideoLogic board and has covered it in great detail (see E30 & E31). The article in E36 was designed to take a broader view of the role of hardware developers in gamesplaying – and in particular, the limitations imposed by existing architectures on the advancement of the games industry. The VideoLogic board has been designed to reduce memory requirements and offers an effective but ultimately short term solution to the problem the PC faces.



# Q and A

**Rely on Edge to cut through the technobabble. Write to Q&A, Edge, 30 Monmouth Street, Bath, BA1 2BW**

**Q** Last year I saw *Ridge Racer Revolution* for PSX in an NTSC version. It looked great because it ran at 60 frames/sec. It was also interlaced. I was very disappointed when I saw the PAL version – it was only going 25 frames/sec, and as far as I could see, was non-interlaced. How can that happen? Do NTSC PSX games converted to PAL lose a lot of speed? Or is it because the PSX processor works faster in NTSC? What about the PAL version of *Tekken 2*, will it also run at a lower framerate that the NTSC version?

**Jesper Giortz,**
**jg@bergsoe4.dk**

**A** The only interlaced version of *Ridge Racer* that exists is a secret test version of *Ridge Racer Revolution* that Sony coded for research purposes. However, despite the fact that it runs in one of the PlayStation's high-res modes (something like 368 x 480), it's doubtful it will ever be released, as it has heavily cut down scenery and only two cars on the track at any one time. It's more likely that you've misjudged the fast 30fps framerate and low-res (256x224) graphics of the NTSC version –



there's actually a big difference between 30fps and 60fps which you'll only be able to appreciate by studying the arcade version of *Ridge Racer*.

As for *Tekken 2*, it seems unlikely that Namco will optimise the PAL version to the extent that, say, Sega has with its *Sega Rally* and *VF2* PAL conversions. A 50fps update is essential for it to be compatible on all UK TVs, and it's unknown just how much recoding needs to be done for UK PlayStation software to be comparable to NTSC code. Technically at least, since it is only the PlayStation's composite encoders that change the 60Hz code to run at 50Hz, RGB signals through Scart could be encoded at 60fps. This disparity, however, is something that Sony seems unlikely to want to be associated with.

**Q** I recently enjoyed the trend of retrogame releases such as the *Museum* collection, so I was happy when I heard that an updated version of *Track & Field* was being released. All articles I have seen say it will involve hectic button-pressing as in the coin-op versions. My question is can you use a joystick like the Asciiware PlayStation one to do the running events as in the coin-op version?

**Jamie Camp,**
**Wickford, Essex**

**A** Konami has released a dedicated controller in Japan, the Hyperstick, (below left), but sadly this will not be marketed in the UK. **Edge** has yet to see such a device so it's not yet known if this peripheral allows the use of the joystick for 'waggling', or is simply a heavy duty button basher.

**Q** 1. Which of the three territories (UK, USA and Japan) will N64 carts be compatible between?
2. I read in *Total!* that the imported N64's signal output is only in composite and S-Video (no RGB) and that the Scart leads give a poorer quality picture as a result. Is this true and if so, what can be done about it?
3. My TV can accept NTSC inputs via the Scart socket, will this be enough to run an imported N64?
4. Will *Monkey Island 3* or any other decent the adventure be coming out for the N64?

**Shaun Willcocks,**
**Congleton, Cheshire**

**A** 1. There's no planned compatibility between foreign N64 carts although until the US machine is released it's not known if the company will be relying solely on plastic tabs to prevent the plugging in of Japanese cartridges or whether it plans to incorporate digital protection into its cartridges.
2. A composite signal will always be inferior to an S-Video or RGB signal and the latter is impossible to get out of the Japanese N64 unless you get your machine internally modified. Unless you have an NTSC compatible TV with an S-Video socket the best option is to get your machine converted by a specialist.
3. Yes, but you'll need a Scart lead wired to S-Video for the best quality NTSC picture. Again, you should contact an importer.
4. LucasArts may well develop such titles for Nintendo DD64 but it would seem to be more feasible for PC titles such as this to arrive for CD consoles.

# next month

Continued Edge 39



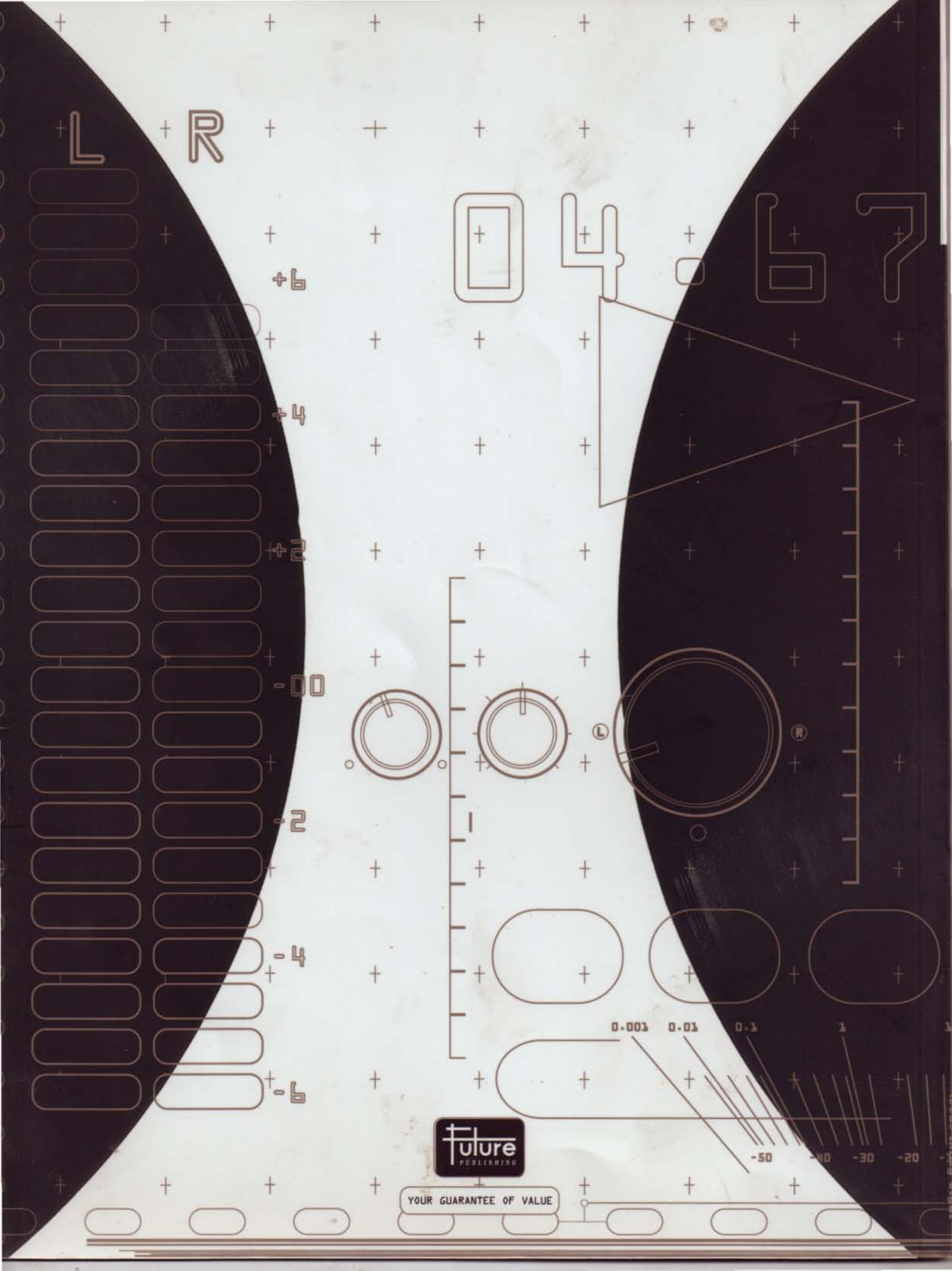
Apple computers are a gameplaying platform of choice for a small but dedicated group of gamers. But most people still prefer a console or PC. Why is this? And how is Apple planning to change people's minds? Next issue, **Edge** speaks the movers and shakers taking Apple forward into the videogame mainstream.

Also, **Edge** investigates the roll of TV companies, past and present, in the videogame revolution. Why have most attempts at producing videogame television been universally derided and often axed? **Edge** speaks to the TV producers involved to see if plans exist for intelligent interactive entertainment coverage on the box.

## Issue thirty-nine

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